DOCUMENT RESUME

ED 149 172 08 CE 014 588

TITLE	Professional Teacher Education Module Series. Resource Person Guide...to Using Performance-Based Teacher Education Materials.
INSTITUTION	Ohio State Univ., Columbus. National Center for Research in Vocational Education.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.
PUB DATE	78
NOTE	114p.; For related documents see CE 011 532, CE 011 534, CE 014 295-355, CE 014 358 (student guide), CE 014 532-539, and CE 014 589-591
AVAILABLE FROM	American Association for Vocational Instructional Materials (AAVIM), 120 Engineering Center, University of Georgia, Athens, Georgia 30602 ($4.80)
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	Administrator Guides; Curriculum Guides; Individualized Curriculum; *Performance Based Teacher Education; Post Secondary Education; Program Administration; *Resource Teachers; *Teacher Education Curriculum; *Teacher Educators; *Teacher Role; Teaching Guides; Teaching Skills; *Vocational Education

ABSTRACT

This guide to the use of a 100-module series of performance-based teacher education (PBTE) materials is addressed to teacher educators, directors of staff development, master teachers, and others with responsibility for guiding and assisting preservice or inservice vocational teachers in the development of professional teaching competencies. There are three chapters and appended resource materials, all geared to the 100 PBTE learning packages, each of which is available separately. (The materials were developed based on competencies identified through research as being important to successful vocational education teachers at both the secondary and postsecondary levels and in all occupational areas). Chapter 1 provides a basic introduction to PBTE and to the materials. The second chapter deals specifically with the resource person's responsibilities relative to planning the teacher's program, guiding learning activities, and assessing teacher performance. The third is devoted to managing the role of the resource person. Appended materials include (1) background information on development of the materials; (2) a master list of the ten subject categories and performance objectives for each; (3) a list of the 100 module titles with their objectives and associated performance elements; (4) time estimates for completion of the modules; (5) a list of required, optional, and alternate resources needed for the modules, and (6) a copy of the student's guide to use of the modules (also available separately). (JT)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED149172

Resource Person Guide...

to Using Performance-Based Teacher Education Materials

PROFESSIONAL TEACHER EDUCATION MODULE SERIES

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

James B. Hamilton, Program Director
Karen M. Quinn, Program Associate

The Center for Vocational Education
The Ohio State University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Joel H. Magisos

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND THE ERIC SYSTEM CONTRACTORS."

Copyright 1978 by The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

Copyright is claimed until January 14, 1982. Thereafter all portions of this work covered by this copyright will be in the public domain.

This work was developed under a contract with Department of Health, Education, and Welfare, National Institute of Education. However, the opinions and other content do not necessarily reflect the position or policy of the Agency, and no official endorsement should be inferred.

1978

ISBN: 0-89606-000-4

Published and distributed by the **American Association for Vocational Instructional Materials (AAVIM)**, 120 Engineering Center, University of Georgia, Athens, Georgia 30602, (404) 542-2586.

CE 014 588

FOREWORD

This guide has been developed to help teacher educators, directors of staff development, master teachers, and other appropriate individuals with responsibility for guiding and assisting preservice or inservice teachers in the development of professional teaching competencies through use of The Center's Performance-Based Teacher Education Modules. A series of 100 performance-based teacher education (PBTE) learning packages focusing upon specific professional competencies of vocational teachers has been developed, extensively field tested, and refined. The competencies upon which the modules are based were identified and verified through research as being important to successful vocational teachers at both the secondary and post-secondary levels of instruction. The modules are suitable for preparation of teachers in all occupational areas.

Each module provides learning experiences that integrate theory and application; each culminates with criterion-referenced assessment of the teacher's performance of the specified competency. The materials are designed for use by teachers in training, either on an individual or group basis, working under the direction, and with the assistance of, teacher educators or other qualified staff development personnel acting as resource persons. Resource persons should be skilled in the teacher competency being developed and should be thoroughly oriented to PBTE concepts and procedures in using these materials.

The design of the materials provides considerable flexibility for planning and conducting performance-based preservice and inservice teacher preparation programs to meet a wide variety of individual needs and interests. The materials are intended for use by universities and colleges, state departments of education, post-secondary institutions, local education agencies, and others responsible for the professional development of teachers and instructors.

Special recognition for their roles in the development, field testing, and revision of this guide goes to James B. Hamilton, Program Director of The Center's Professional Development in Vocational Education area, who was responsible for writing the major portion of the field-test version and for preparation of this published version of the guide; and to Karen Quinn, Program Associate, for assistance in writing the field-test version and refinement of the published version. Recognition is also extended to Glen Fardig for assistance with the outline of the guide, to Robert Norton for assistance with the portion dealing with assessment of teacher performance, to May Huang for preliminary drafts of the descriptions of module components and purposes, to Lois Harrington for preparation of the appendix materials on availability of resources for module use, and to Roland Peterson of the University of Minnesota for contributions to the area of "Managing the Role of the Resource Person."

Appreciation is extended to all those field site coordinators, teacher educators, cooperating teachers, directors of staff development, and others who used this guide under field-test conditions and who provided valuable feedback for its refinement. Special thanks go to Dr. Harold Parady, Executive Director of the American Association for Vocational Instructional Materials, and to George Smith, Art and Layout Editor, for their cooperation and valuable assistance in the publication of this guide.

The Center is grateful to the National Institute of Education (NIE) for sponsorship of The Center's PBTE curricula development effort (of which this guide was one product) from 1972 through its completion. Appreciation is extended to the Bureau of Occupational and Adult Education of the U.S. Office of Education for its sponsorship of training and of the advanced testing of The Center's PBTE curricula through the National Institute of Performance-Based Teacher Education at ten sites under provisions of EPDA Part F, Section 553. Thanks are also due to the eight other sites who participated in the advanced testing effort under NIE and self-sponsorship.

Robert E. Taylor
Executive Director
The Center for Vocational Education

THE CENTER FOR VOCATIONAL EDUCATION
The Ohio State University • 1960 Kenny Road • Columbus, Ohio 43210

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The Center fulfills its mission by:

- Generating knowledge through research.
- Developing educational programs and products.
- Evaluating individual program needs and outcomes.
- Installing educational programs and products.
- Operating information systems and services.
- Conducting leadership development and training programs.

AAVIM

**AMERICAN ASSOCIATION
FOR VOCATIONAL
INSTRUCTIONAL MATERIALS**

Engineering Center
University of Georgia
Athens, Georgia 30602

The American Association for Vocational Instructional Materials (AAVIM) is an interstate organization of universities, colleges and divisions of vocational education devoted to the improvement of teaching through better information and teaching aids.

CONTENTS

INTRODUCTION 5

Chapter I. Performance-Based Teacher Education and The Center's PBTE Materials 7

Chapter II. The Resource Person's Responsibilities 25

Chapter III. Managing the Role of the Resource Person 35

Appendix A. Development of The Center's Performance-Based Teacher Education Materials 43

Appendix B. Master List of Categories and Performance Elements 49

Appendix C. Module Titles, Objectives, and Associated Performance Elements 55

Appendix D. Time Estimates for Completion of The Center's PBTE Modules 85

Appendix E. List of Required, Optional, and Alternate Resources Needed for The Center's PBTE Modules 89

Appendix F. Student Guide to Using Performance-Based Teacher Education Materials 103

INTRODUCTION

The purpose of this guide is to assist you in using the performance-based professional vocational teacher education curricular materials developed by The Center for Vocational Education. The design of these materials (hereinafter called "The Center's PBTE materials") requires knowledgeable, competent, professional educators to fulfill the role of "resource person" to the pre- and inservice teachers using these materials in developing or improving their teaching competence.

Vaguely knowledgeable people cannot fulfill the role effectively. The role of the resource person is to provide guidance, to assist, and to evaluate as teachers use these materials. These functions of the resource person might be carried out by one or more persons, depending upon the particular setting in which the curricular materials are being used. You, as a resource person, might be a teacher educator on a college campus, a supervising or master teacher in a local school, a director of professional development in a post-secondary institution, a supervisor, a school administrator, a field resource person who works with teachers on the job, or any other professional educator who assists others in developing teaching competence.

Some basic assumptions have been made in the development of this resource person's guide. The first of these assumptions is that the decision has been made to conduct a performance-based teacher education (PBTE) program. It is also assumed that the decision has been made to use The Center's PBTE materials, or that, at least, serious consideration is being given to their use in conducting this program. We assume that some planning has been done toward implementation of the program and, of considerable importance, that you will be fulfilling the role of a resource person to individuals using these curricular materials. This guide has been developed to assist you in performing the functions of the resource person in an effective and efficient manner.

The Center's PBTE materials consist primarily of 100 performance-based vocational teacher education modules. Other publications designed to assist in implementation and use of The Center's PBTE modules are the *Student Guide to Using Performance-Based Teacher Education Materials*, *Guide to the Implementation of Performance-Based Teacher Education*, and *Performance-Based Teacher Education: The State of the Art—General Education and Vocational Education*.

This resource person guide is composed of three chapters and appended resource materials. The first chapter of the guide provides a basic introduction to performance-based teacher education and to The Center's PBTE materials. Characteristics of PBTE are presented and discussed, and characteristics and components of The Center's PBTE materials are presented. The second chapter of the guide deals specifically and in some detail with the resource person's responsibilities relative to planning the teacher's program, guiding learning activities, and assessing teacher performance. The third chapter is devoted to managing the role of the resource person.

Appended materials are provided as resources for your use in working with pre- and inservice teachers who are using The Center's PBTE materials. An overview of The Center's teacher competency research base and PBTE curricula development is also appended to add to your knowledge about the materials.

Chapter I

PERFORMANCE-BASED TEACHER EDUCATION AND THE CENTER'S PBTE MATERIALS

This section of the resource person's guide will present, with brief discussions, information about performance-based teacher education and about The Center's performance-based teacher education materials. You should find this information useful in furthering your own knowledge and understanding of PBTE concepts and The Center's PBTE materials as well as in communicating these concepts to teachers and others with whom you will be working.

Performance-Based Teacher Education

PBTE Defined

PBTE is an approach to teacher preparation in which the teacher is required to demonstrate essential teaching tasks in an actual teaching situation. Actual performance of the tasks ensures that the teacher has not only the knowledge required, but also the ability to perform the competencies (teaching skills or tasks) that are essential to successful teaching.

Many traditional teacher education courses have tended to place emphasis on the theory of teaching rather than focusing upon the specific teaching skills needed. In PBTE programs, individuals must demonstrate their ability to perform as teachers in an actual classroom.

Conventional teacher education programs and state certification regulations have often focused on giving teachers the necessary number of courses with the proper course titles in order to meet graduation and certification requirements. In PBTE programs, the focus is upon demonstrating the specified competencies (knowledge, skills, and attitudes) essential to successful teaching.

The terms "competency-based teacher education" (CBTE) and "performance-based teacher education" (PBTE) are often used synonymously by educational leaders. Some educators, however, distinguish between the two terms. The word "competency" emphasizes the fact that learning in competency-based programs is structured around the **identified and verified competencies** needed by teachers. The term "competency-based teacher education" is, therefore, appropriate for any such teacher education program structured upon teacher competencies.

In performance-based programs, the word "performance" is used to emphasize the fact that these programs require teachers to **demonstrate** their **ability to perform** the essential competencies in an actual classroom setting. The Center's PBTE modules are structured upon identified and verified teacher competencies which the learner is required to perform in an actual teaching situation. The curricular materials are, therefore, referred to as a performance-based teacher education curriculum.

Characteristics of PBTE Programs

Regardless of the terminology preferred by individual practitioners, the preparation of the individual to perform effectively in the teaching role remains of utmost importance. The study of widely accepted concepts of PBTE and of many PBTE programs has resulted in the identification of several characteristics of teacher education programs which are considered to be essential if the program is to be considered a PBTE program. These **essential characteristics** are—[1]

- **Competencies** to be demonstrated by the teacher **are identified,** based upon what a teacher must know and be able to do. The competencies are stated as behaviors which can be assessed and are shared with the teacher at the beginning of the program.
- **Criteria** to be used in assessing each specific competency **are stated,** including the conditions under which assessment will occur and the expected level of mastery. Criteria are also shared with the teacher at the start of the program.
- The instructional **program focuses upon** development and evaluation of the **specified competencies** by the teacher.

---

[1] Adapted from American Association of Colleges of Teacher Education, *Achieving the Potential of PBTE: Recommendations*, PBTE Series: No. 16 (Washington, DC: AACTE, 1974), pp. 32–33.

- **Assessment** of the teacher's competency **uses** his/her **performance in the teaching role** as the primary source of evidence. Objective evidence of the teacher's knowledge related to planning, analyzing, interpreting, or evaluating situations or behavior are also considered.
- The teacher's rate of **progress** through the program **is determined by demonstrated competency** rather than by time or course completion.

In addition to the above essential characteristics, there are several additional **desirable characteristics** of PBTE programs. These include—

- Instruction is individualized and personalized.
- The learning experience is guided by feedback.
- The program as a whole is systemic.
- Emphasis is on exit, not on entrance, requirements.
- Instruction is modularized.
- The teacher is held accountable for performance.

The above desirable characteristics of PBTE programs certainly contribute toward achievement of the essentials of a PBTE program. Many of these have been associated with sound instructional practice for some time.

PBTE and Conventional Programs Contrasted

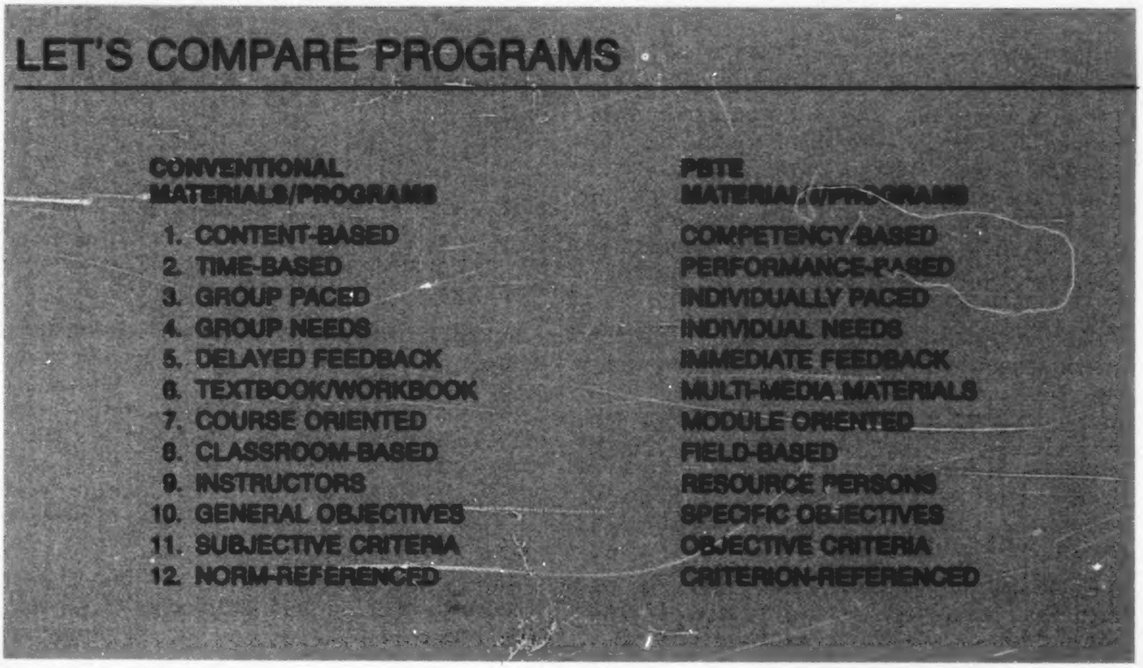
From the characteristics of PBTE programs, it is evident that a great deal of emphasis is placed upon the identification, attainment, and assessment of teaching competencies. It may be helpful in describing PBTE programs to contrast several features of PBTE programs with features often characterizing conventional teacher education programs.

In Figure 1, characteristics of seven aspects of conventional vocational teacher education programs are contrasted with the same aspects of PBTE programs. These contrasts are presented as **general** contrasts between the two types of programs. It should be noted that, in examining individual conventional teacher education programs, one or more of the program features characterizing PBTE programs might be found.

You may find the further comparisons of conventional and PBTE programs shown in Figure 2 to be useful in explaining and clarifying these differences to teachers.

FIGURE 1

FIGURE 2



LET'S COMPARE PROGRAMS

CONVENTIONAL MATERIALS/PROGRAMS	PBTE MATERIALS/PROGRAMS
1. CONTENT-BASED	COMPETENCY-BASED
2. TIME-BASED	PERFORMANCE-BASED
3. GROUP PACED	INDIVIDUALLY PACED
4. GROUP NEEDS	INDIVIDUAL NEEDS
5. DELAYED FEEDBACK	IMMEDIATE FEEDBACK
6. TEXTBOOK/WORKBOOK	MULTI-MEDIA MATERIALS
7. COURSE ORIENTED	MODULE ORIENTED
8. CLASSROOM-BASED	FIELD-BASED
9. INSTRUCTORS	RESOURCE PERSONS
10. GENERAL OBJECTIVES	SPECIFIC OBJECTIVES
11. SUBJECTIVE CRITERIA	OBJECTIVE CRITERIA
12. NORM-REFERENCED	CRITERION-REFERENCED

The Center's PBTE Materials

The Center for Vocational Education, The Ohio State University, has developed a performance-based vocational teacher education curriculum especially designed for use in implementing preservice and/or inservice PBTE programs in vocational education. These PBTE curricular materials, developed under sponsorship of the National Institute for Education and USOE, consist of 100 professional vocational teacher education modules, a student guide, a resource person guide, an implementation guide, and a state-of-the-art report.

The development of the materials involved three major phases: (1) identification of important teaching competencies (research base), (2) development of curricular materials, and (3) testing and revision of materials. These three developmental phases, followed by a dissemination phase, are more fully described in Appendix A, Development of The Center's Performance-Based Teacher Education Materials.

The Center's PBTE curricula program is a complex instructional system. It is designed for the implementation of performance-based vocational teacher education for all service areas, at both the preservice and inservice levels. The system is presented in this section with a brief description of each of its five important characteristics.

Characteristics and Advantages of the Program

There are five unique characteristics and advantages inherent in The Center's PBTE program.

First, learning materials in the system are developed and organized in the form of individualized packages, or **modules,** each of which has as its base one or more of the 384 verified competencies. By basing the modules on the verified competencies, there is solid assurance that the modules represent the actual competencies needed by vocational teachers.

Second, the program is designed to maximize **individualized instruction.** All of the modules have been developed so as to allow for tailor-made programs to meet teachers' individual needs and interests. Pre- and inservice teachers, with the help of their resource persons, can decide on the total number of modules they need to take, and on the sequence and pace in which they can best develop the required competencies.

Third, the instructional system has been designed to provide teachers with **immediate feedback** after each learning experience. Explicit criterion-referenced evaluation devices are used to assess teachers' progress and final performance. This provides teachers with timely guidance to assist in their learning.

One of the most important characteristics of the program is that teachers are always required to demonstrate in an actual school situation that they have achieved the expected competency. The final experience in each module requires this **actual school performance.** Opportunity to practice the competency in simulated situations is provided prior to the teacher's final performance. This helps to ensure that teachers have sufficient preparation to gradually gain competence in their new professional role in the field.

The last, but not the least important, characteristic of The Center's PBTE curricula program is that almost all of the modules are **self-contained.** In most cases, the modules include all the essential information a teacher needs to accomplish the expected competency. This provides great flexibility for the modules to be used on a group or on an individual basis.

Occasionally, outside references are required when it is felt that (1) the reference is so exceptional or important that teachers in the field should be familiar with the original reference, and/or (2) the information can best be obtained through reading the original document (e.g., reading one's state plan for vocational education, or the handbook for the student vocational organization in one's service area). Sometimes, additional outside references are suggested as optional readings to supplement and enrich the learner's experiences.

Essential Elements of the System Defined

Many important elements undergird The Center's PBTE curricula program. Four of them are essential to successful implementation of the program: modules and related materials; trained resource persons; resource center; and school setting.

Modules and related materials.—Basically, a module is a unit of learning. It includes a set of activities intended to assist in the teacher's achievement of a teaching competency specified in the form of a **terminal objective.** Some modules focus on finite teaching competencies that can be achieved in a short time, whereas others are broad in scope and require longer periods of time for completion.

Although the scope, size, and content of each module vary with its terminal objective and setting, its format is standardized into four major components: (1) Introduction; (2) About This Module; (3) About Using The Center's PBTE Modules; and (4) Learning Experiences.

There are a total of 100 modules in The Center's PBTE curricula program. They have been grouped into ten categories and color-coded for easy reference as follows:

Category	Title	Color Code	No. of Modules
A	Program Planning, Development, and Evaluation	Red	11
B	Instructional Planning	Yellow	6
C	Instructional Execution	Turquoise	29
D	Instructional Evaluation	Lime	6
E	Instructional Management	Orange	9
F	Guidance	Gold	5
G	School-Community Relations	Rust	10
H	Student Vocational Organization	Light Gold	6
I	Professional Role and Development	Gray	8
J	Coordination of Cooperative Education	Green	10
	Total		100

In addition to the 100 modules, other related materials have been developed to ensure effective implementation of the program. These include a teacher competency profile, an implementation guide, a resource person guide, a student guide, a slide/tape presentation on PBTE and The Center's materials, a slide/tape presentation on the role of the resource person, a slide/tape for orienting pre- and inservice teachers to PBTE, and a state-of-the-art report on PBTE and PBVTE.

All The Center's modules and related materials have been carefully developed, and the modules have been rigorously tested in the field. The modules are a set of well-designed units of learning, containing reliable information and strategies to develop the verified teaching competencies of vocational teachers.

By themselves, however, the modules cannot produce or train competent vocational teachers; they must be incorporated into a total PBVTE program and implemented effectively so the pre- and inservice teachers using them can accomplish the expected competencies. **Guiding the teacher's effective use of the modules** is the main function of the resource person in the instructional system.

Resource persons.—A resource person is the professor, instructor, cooperating teacher, administrator, supervisor, director of professional development, or other person who is responsible for guiding and helping the teacher plan and progress through his/her educational program. In The Center's PBTE program, a teacher may work with more than one resource person for each module.

The success of The Center's PBTE program depends to a great extent on the effectiveness of the resource person, working individually or as part of a team, in (1) **guiding** the selection of, and progress through, appropriate learning experiences and activities; (2) **arranging** for the teacher to demonstrate competency in an actual school setting; and (3) **assessing** the teacher's performance in the actual school situation. It is essential that the resource person be trained to carry out these functions effectively.

Resource center.—The resource center is an integral part of The Center's PBTE program. It gives teachers access to most, if not all, of the resources that are needed to complete the modules, and provides the space, facilities, and equipment whereby they can study, plan, videotape their performance, work with fellow learners in small or large groups, and have conferences with resource persons. Ideally, the resource center is conveniently located with long service hours. It should be managed in order to provide the best possible service to the users.

Since in The Center's PBTE program, teachers do not all study and use the resource materials and facilities at the same time, maintaining sufficient numbers of up-to-date instructional materials is essential. Consequently, facilities must be available for teachers for many hours of the day, and/or a check-out system of materials must be provided so that teachers can study and complete the learning activities. The resource person as well as the teachers must be familiar with the operational procedure of the center in order to be able to use its services effectively.

School setting.—The Center's PBTE program is field-based rather than classroom-based. The final learning experience of all modules requires the teacher to demonstrate his/her competency in the actual teacher role; that is, to perform the competency in an actual secondary or post-secondary school setting when he/she is an intern, a student teacher, or an inservice teacher.

General Learning Procedure

The pre- or inservice teacher entering the PBTE program is provided with a list of prescribed competencies he/she needs to develop (or identifies these competencies with the help of the resource person). The modules covering those competencies are then selected. The teacher can take these modules one at a time, or can work on two or more modules simultaneously. Guided by the resource person, the teacher determines which learning experiences in a module he/she need to take (i.e., those covering skills in which the teacher is not already competent).

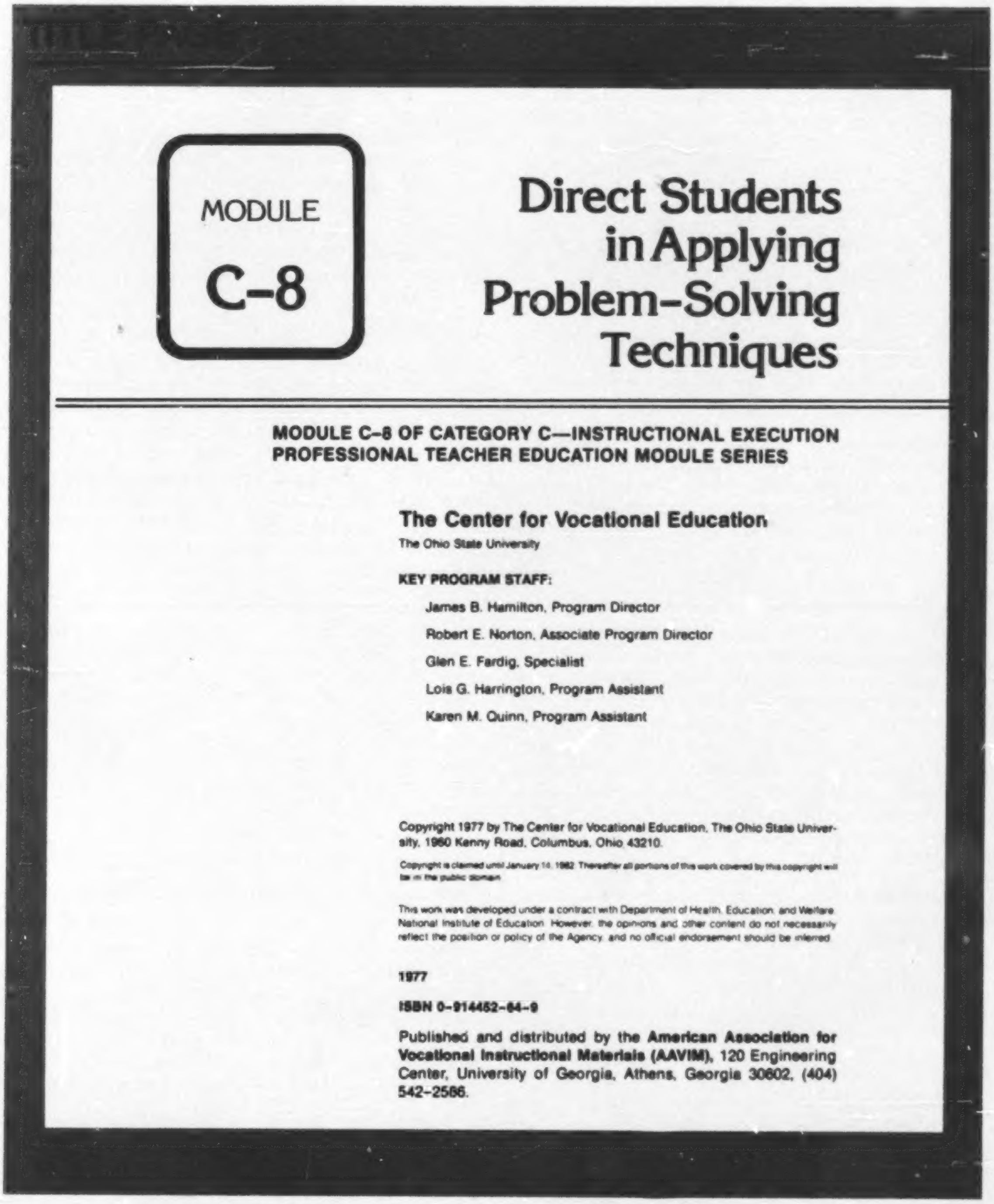
Each module provides the teacher with background information regarding the competency, as well as an opportunity to practice the competency in a simulated situation. When the teacher feels that he/she has adequate background and practice in the competency, arrangements are made for assessment by the resource person in an actual school situation.

Components of the Module, Intended Purposes, and Approaches Used

As indicated earlier, the module format is standardized into a title page and four major components: (1) Introduction; (2) About This Module; (3) About Using The Center's PBTE Modules; and (4) Learning Experiences. These components (their nature, their intended purposes, and the approaches used in each) are discussed in the order of their appearance or reference in a module.

Title page.—The title page lists the module title, and the module category and number. (See Sample 1.) This module title spells out in performance terms (through the use of an **action verb**) the competency to be accomplished, such as *Direct Students in Applying Problem-Solving Techniques.* Under the title, you will find the module category and number. They help you to locate the

SAMPLE 1



MODULE
C–8

Direct Students in Applying Problem-Solving Techniques

MODULE C-8 OF CATEGORY C—INSTRUCTIONAL EXECUTION
PROFESSIONAL TEACHER EDUCATION MODULE SERIES

The Center for Vocational Education
The Ohio State University

KEY PROGRAM STAFF:

James B. Hamilton, Program Director
Robert E. Norton, Associate Program Director
Glen E. Fardig, Specialist
Lois G. Harrington, Program Assistant
Karen M. Quinn, Program Assistant

Copyright 1977 by The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

Copyright is claimed until January 14, 1982. Thereafter all portions of this work covered by this copyright will be in the public domain.

This work was developed under a contract with Department of Health, Education, and Welfare National Institute of Education. However, the opinions and other content do not necessarily reflect the position or policy of the Agency, and no official endorsement should be inferred.

1977

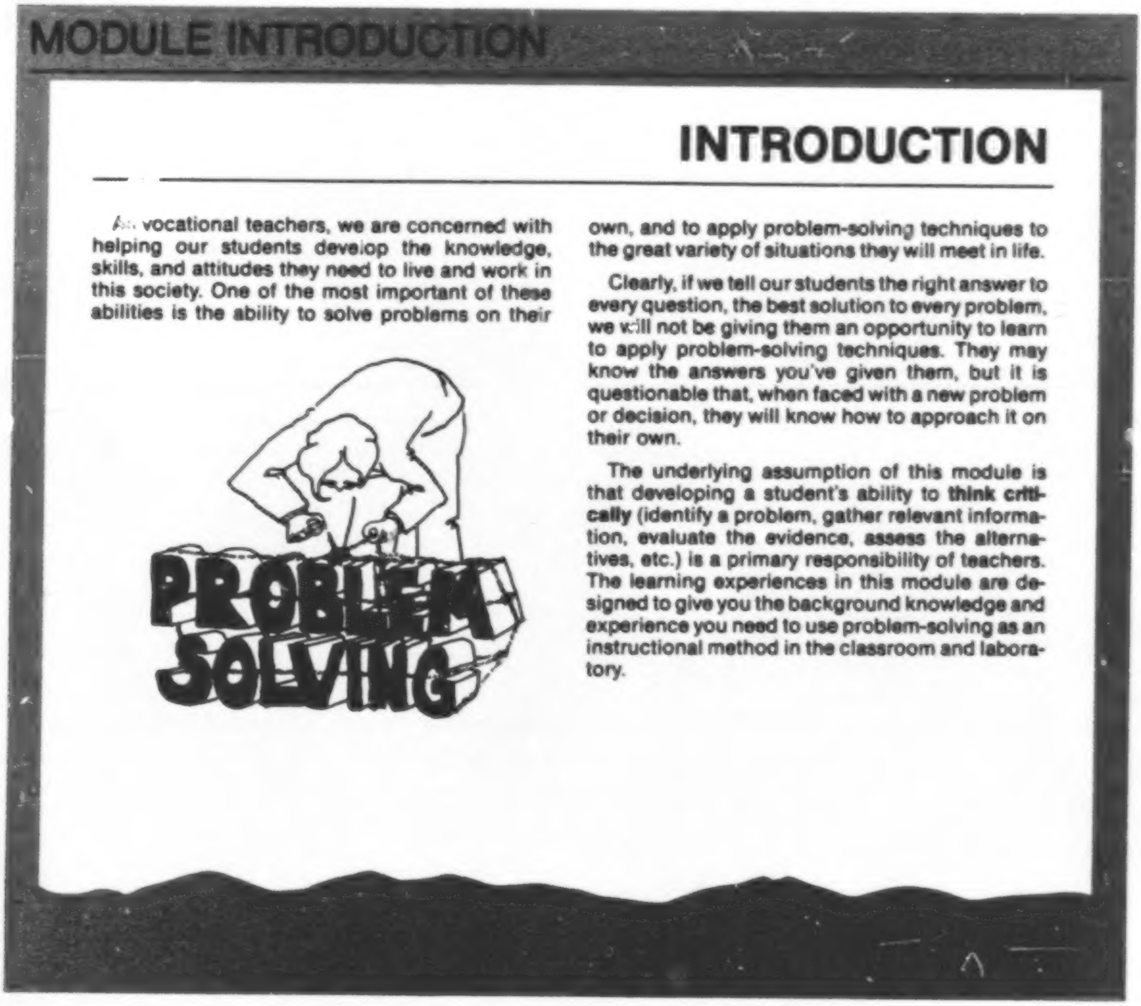
ISBN 0-914452-64-9

Published and distributed by the **American Association for Vocational Instructional Materials (AAVIM),** 120 Engineering Center, University of Georgia, Athens, Georgia 30602, (404) 542-2586.

module in the master list, to find out its relationship with other modules, and to organize the modules in a resource center.

Introduction.—The introduction explains what competency is covered in the module, and the importance of, or need for, this competency in effective teaching. It is designed to motivate the teacher to want to acquire the skill, and to establish a frame of reference for the module. If necessary, terms related to the competency to be covered are defined. Sample 2 shows the introduction from Module C--8.

SAMPLE 2



MODULE INTRODUCTION

INTRODUCTION

As vocational teachers, we are concerned with helping our students develop the knowledge, skills, and attitudes they need to live and work in this society. One of the most important of these abilities is the ability to solve problems on their own, and to apply problem-solving techniques to the great variety of situations they will meet in life.

Clearly, if we tell our students the right answer to every question, the best solution to every problem, we will not be giving them an opportunity to learn to apply problem-solving techniques. They may know the answers you've given them, but it is questionable that, when faced with a new problem or decision, they will know how to approach it on their own.

The underlying assumption of this module is that developing a student's ability to **think critically** (identify a problem, gather relevant information, evaluate the evidence, assess the alternatives, etc.) is a primary responsibility of teachers. The learning experiences in this module are designed to give you the background knowledge and experience you need to use problem-solving as an instructional method in the classroom and laboratory.

About This Module.—This component of the module familiarizes the teacher with the module **objectives,** the **prerequisites** for the module (if any), the **resources** needed for the module, and the **number(s) of the performance elements** covered in the module. (See Sample 3.)

The **Objectives** section lists the terminal objective (the competency which the teacher will be expected to perform in an actual school situation) and the enabling objectives included in the module.

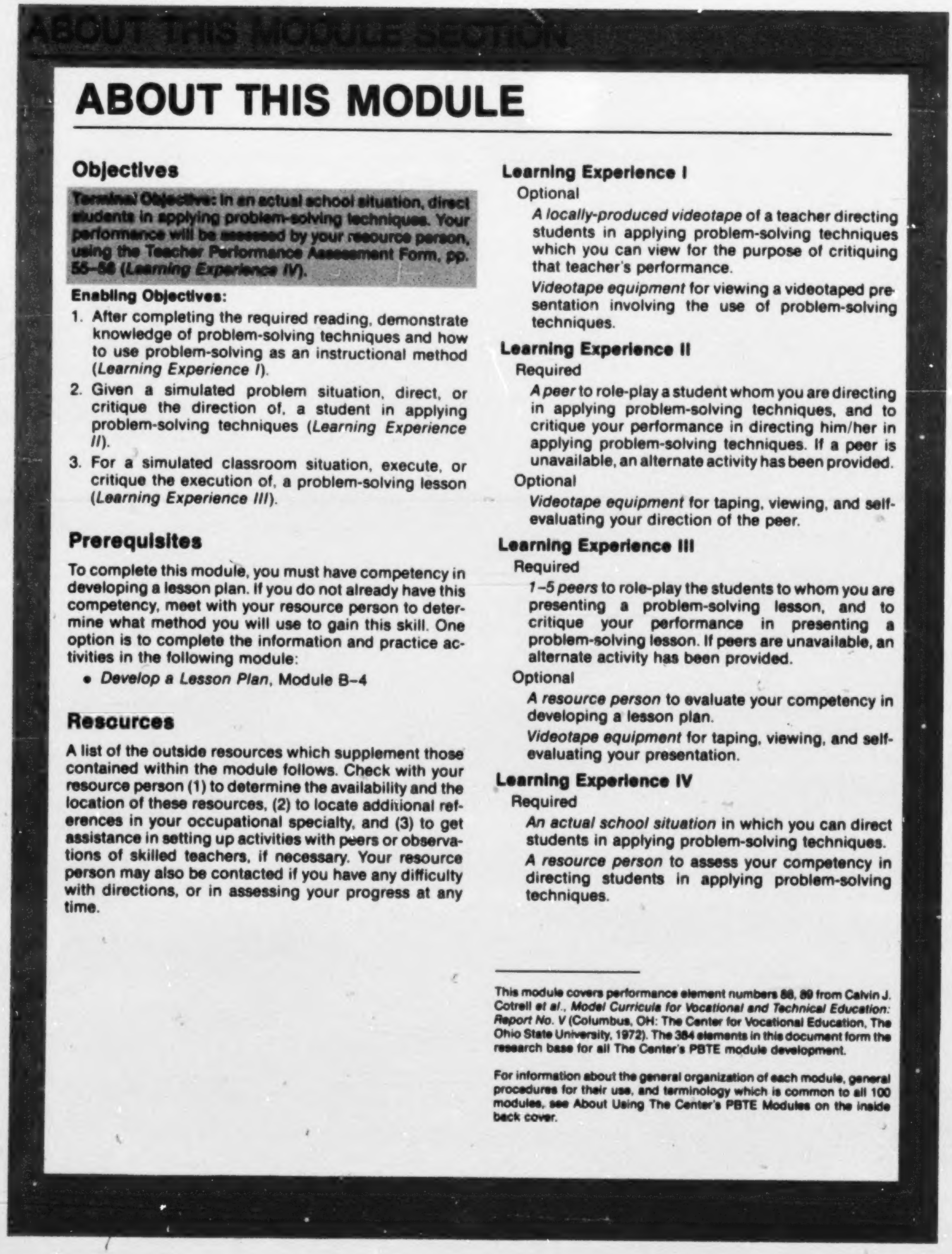
If there are competencies the teacher should possess to successfully pursue the module, these are listed in a **Prerequisites** section. Although these competencies are listed in terms of module titles, the explanatory information advises the teacher that the prerequisite competencies need not necessarily be obtained through completing modules, but may be acquired through other means agreed upon by the resource person and teacher. It should also be noted that module prerequisites as shown are not always absolute. Although the listed prerequisites are considered highly desirable for the successful completion of a module, there are times when expediency demands that the module be pursued without full completion of the prerequisites. Experience has shown that this is often done successfully.

The **Resources** section lists, by learning experience, the required and optional outside resources needed in order to complete the module, with a brief explanation of how they will be used. This enables the resource person to make arrangements to secure the necessary resources prior to the time when a teacher starts the module. (See Appendix E for a complete list of resources needed for all modules.) The introduction to the resources section gives the teacher directions for obtaining these resources.

The **number(s) of the performance elements** covered in the module is given in a footnote at the bottom of the About This Module section. Each of the 384 performance elements identified in the research phase of The Center's PBTE curricula program is coded with a number for easy cross-reference (see Appendix B).

A second footnote in the About This Module section directs the user to the inside back cover of the module (the About Using The Center's PBTE Modules section) for information which is **common** to all 100 of The Center's PBTE modules. This common information will need to be read only for the first few modules or individual experiences.

SAMPLE 3



ABOUT THIS MODULE SECTION

ABOUT THIS MODULE

Objectives

Terminal Objective: In an actual school situation, direct students in applying problem-solving techniques. Your performance will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 55–56 (*Learning Experience IV*).

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of problem-solving techniques and how to use problem-solving as an instructional method (*Learning Experience I*).
2. Given a simulated problem situation, direct, or critique the direction of, a student in applying problem-solving techniques (*Learning Experience II*).
3. For a simulated classroom situation, execute, or critique the execution of, a problem-solving lesson (*Learning Experience III*).

Prerequisites

To complete this module, you must have competency in developing a lesson plan. If you do not already have this competency, meet with your resource person to determine what method you will use to gain this skill. One option is to complete the information and practice activities in the following module:

- *Develop a Lesson Plan*, Module B–4

Resources

A list of the outside resources which supplement those contained within the module follows. Check with your resource person (1) to determine the availability and the location of these resources, (2) to locate additional references in your occupational specialty, and (3) to get assistance in setting up activities with peers or observations of skilled teachers, if necessary. Your resource person may also be contacted if you have any difficulty with directions, or in assessing your progress at any time.

Learning Experience I

Optional

A locally-produced videotape of a teacher directing students in applying problem-solving techniques which you can view for the purpose of critiquing that teacher's performance.

Videotape equipment for viewing a videotaped presentation involving the use of problem-solving techniques.

Learning Experience II

Required

A peer to role-play a student whom you are directing in applying problem-solving techniques, and to critique your performance in directing him/her in applying problem-solving techniques. If a peer is unavailable, an alternate activity has been provided.

Optional

Videotape equipment for taping, viewing, and self-evaluating your direction of the peer.

Learning Experience III

Required

1–5 peers to role-play the students to whom you are presenting a problem-solving lesson, and to critique your performance in presenting a problem-solving lesson. If peers are unavailable, an alternate activity has been provided.

Optional

A resource person to evaluate your competency in developing a lesson plan.

Videotape equipment for taping, viewing, and self-evaluating your presentation.

Learning Experience IV

Required

An actual school situation in which you can direct students in applying problem-solving techniques.

A resource person to assess your competency in directing students in applying problem-solving techniques.

This module covers performance element numbers 88, 89 from Calvin J. Cotrell *et al.*, *Model Curricula for Vocational and Technical Education: Report No. V* (Columbus, OH: The Center for Vocational Education, The Ohio State University, 1972). The 384 elements in this document form the research base for all The Center's PBTE module development.

For information about the general organization of each module, general procedures for their use, and terminology which is common to all 100 modules, see About Using The Center's PBTE Modules on the inside back cover.

About Using The Center's Modules.—This component provides general information applicable to each of The Center's 100 modules: module **organization, procedures** for using modules, module **terminology,** and explanations of the **levels of performance for final assessment.** (See Sample 4.)

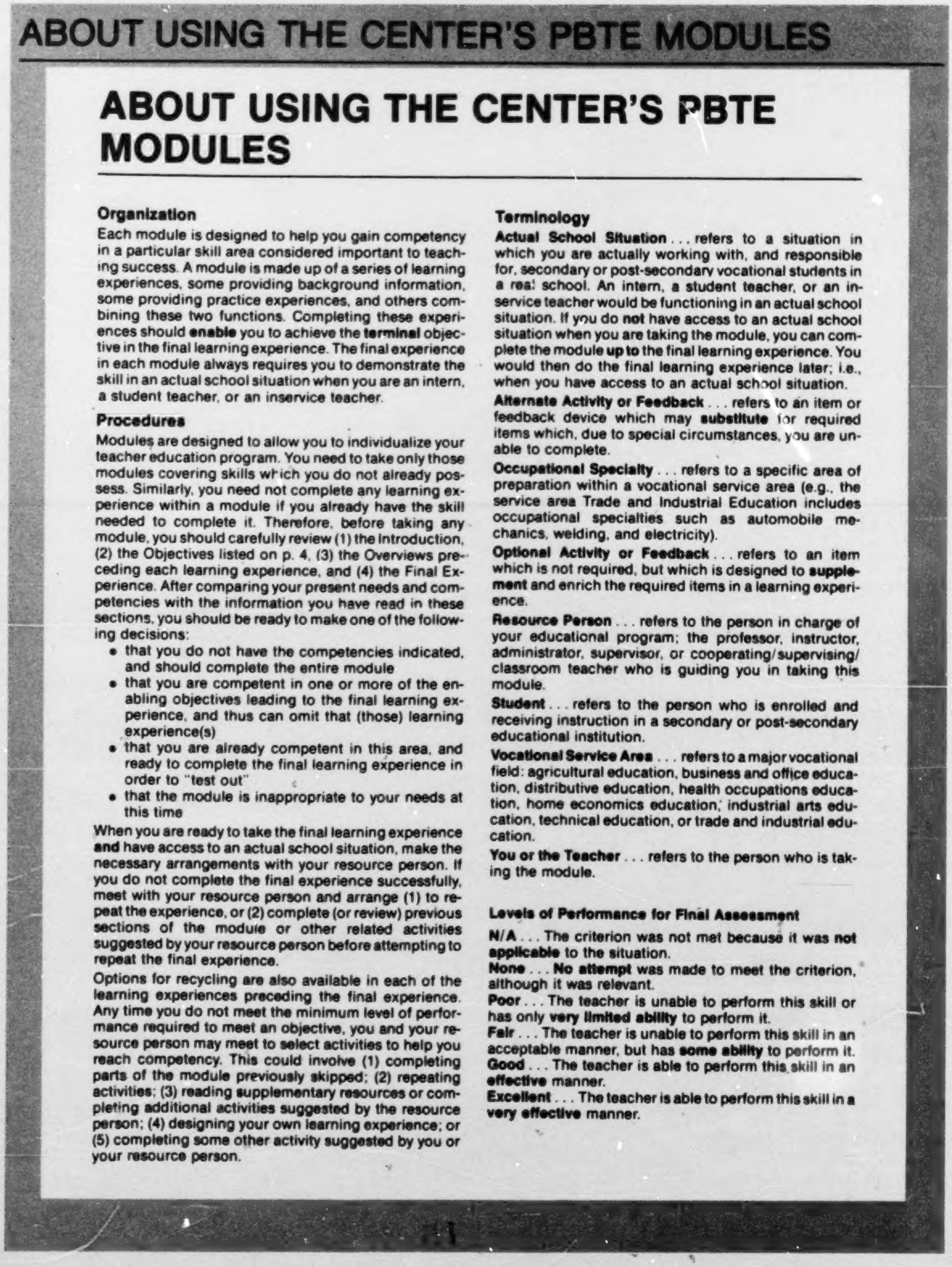
The **Organization** section explains in very general terms how a module is structured and the types of learning experiences in a module.

The **Procedures** section tells the teacher what options he/she has for completing a module; i.e., how to decide which learning experiences need to be completed and which can be skipped; or whether to attempt to meet the terminal objective immediately.

The **Terminology** section defines the **standard terms** used in all modules. (Terms specific to a particular module are defined in the introduction or in an information sheet within a learning experience.)

The **Levels of Performance for Final Assessment** section further explains and clarifies for the teacher and resource person the level of performance terms used in the Teacher Performance Assessment Form within the final experience in each module.

SAMPLE 4



ABOUT USING THE CENTER'S PBTE MODULES

ABOUT USING THE CENTER'S PBTE MODULES

Organization

Each module is designed to help you gain competency in a particular skill area considered important to teaching success. A module is made up of a series of learning experiences, some providing background information, some providing practice experiences, and others combining these two functions. Completing these experiences should **enable** you to achieve the **terminal** objective in the final learning experience. The final experience in each module always requires you to demonstrate the skill in an actual school situation when you are an intern, a student teacher, or an inservice teacher.

Procedures

Modules are designed to allow you to individualize your teacher education program. You need to take only those modules covering skills which you do not already possess. Similarly, you need not complete any learning experience within a module if you already have the skill needed to complete it. Therefore, before taking any module, you should carefully review (1) the Introduction, (2) the Objectives listed on p. 4, (3) the Overviews preceding each learning experience, and (4) the Final Experience. After comparing your present needs and competencies with the information you have read in these sections, you should be ready to make one of the following decisions:

- that you do not have the competencies indicated, and should complete the entire module
- that you are competent in one or more of the enabling objectives leading to the final learning experience, and thus can omit that (those) learning experience(s)
- that you are already competent in this area, and ready to complete the final learning experience in order to "test out"
- that the module is inappropriate to your needs at this time

When you are ready to take the final learning experience **and** have access to an actual school situation, make the necessary arrangements with your resource person. If you do not complete the final experience successfully, meet with your resource person and arrange (1) to repeat the experience, or (2) complete (or review) previous sections of the module or other related activities suggested by your resource person before attempting to repeat the final experience.

Options for recycling are also available in each of the learning experiences preceding the final experience. Any time you do not meet the minimum level of performance required to meet an objective, you and your resource person may meet to select activities to help you reach competency. This could involve (1) completing parts of the module previously skipped; (2) repeating activities; (3) reading supplementary resources or completing additional activities suggested by the resource person; (4) designing your own learning experience; or (5) completing some other activity suggested by you or your resource person.

Terminology

Actual School Situation . . . refers to a situation in which you are actually working with, and responsible for, secondary or post-secondary vocational students in a real school. An intern, a student teacher, or an inservice teacher would be functioning in an actual school situation. If you do **not** have access to an actual school situation when you are taking the module, you can complete the module **up to** the final learning experience. You would then do the final learning experience later; i.e., when you have access to an actual school situation.

Alternate Activity or Feedback . . . refers to an item or feedback device which may **substitute** for required items which, due to special circumstances, you are unable to complete.

Occupational Specialty . . . refers to a specific area of preparation within a vocational service area (e.g., the service area Trade and Industrial Education includes occupational specialties such as automobile mechanics, welding, and electricity).

Optional Activity or Feedback . . . refers to an item which is not required, but which is designed to **supplement** and enrich the required items in a learning experience.

Resource Person . . . refers to the person in charge of your educational program; the professor, instructor, administrator, supervisor, or cooperating/supervising/classroom teacher who is guiding you in taking this module.

Student . . . refers to the person who is enrolled and receiving instruction in a secondary or post-secondary educational institution.

Vocational Service Area . . . refers to a major vocational field: agricultural education, business and office education, distributive education, health occupations education, home economics education, industrial arts education, technical education, or trade and industrial education.

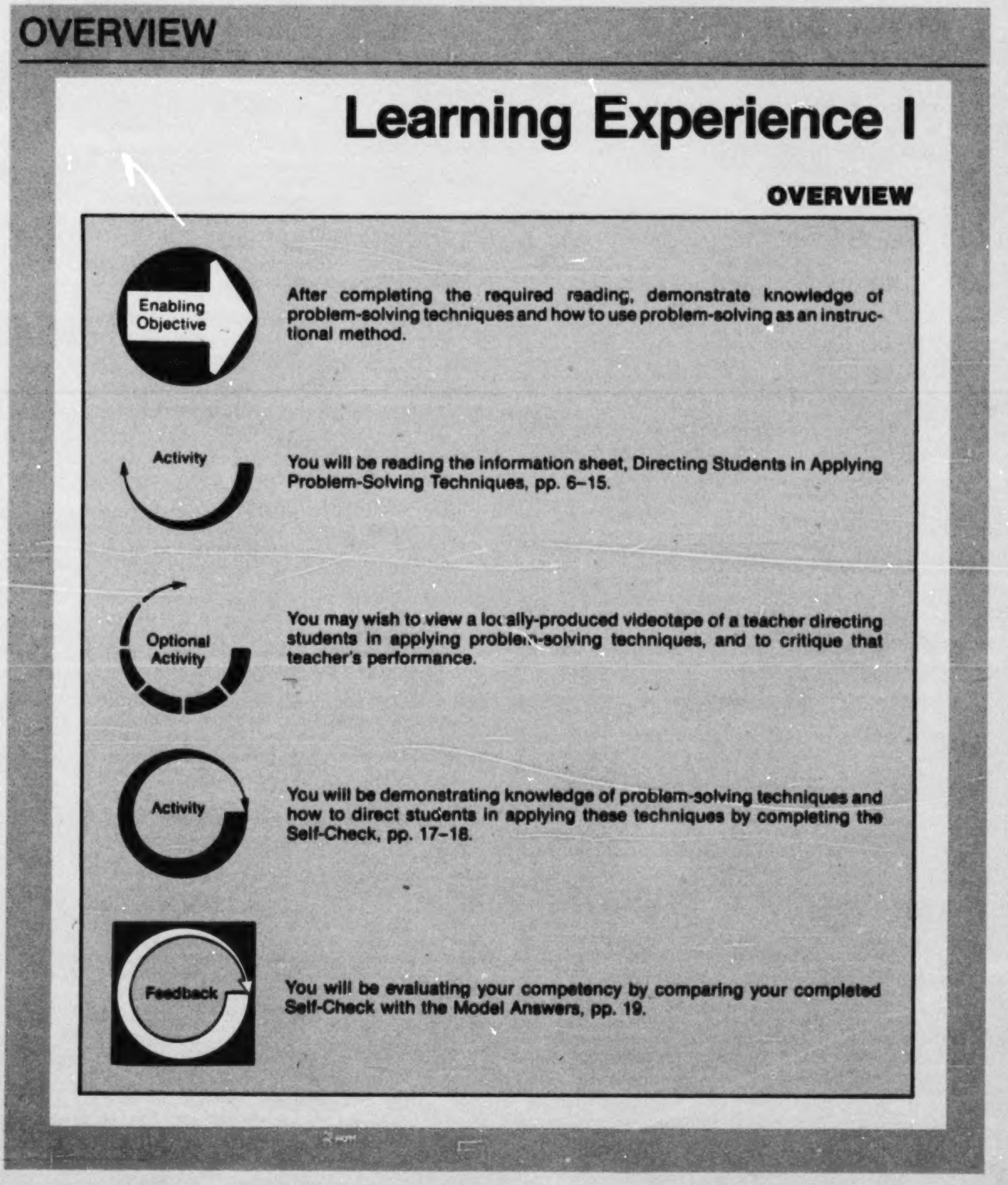
You or the Teacher . . . refers to the person who is taking the module.

Levels of Performance for Final Assessment

N/A . . . The criterion was not met because it was **not applicable** to the situation.
None . . . **No attempt** was made to meet the criterion, although it was relevant.
Poor . . . The teacher is unable to perform this skill or has only **very limited ability** to perform it.
Fair . . . The teacher is unable to perform this skill in an acceptable manner, but has **some ability** to perform it.
Good . . . The teacher is able to perform this skill in an **effective** manner.
Excellent . . . The teacher is able to perform this skill in a **very effective** manner.

Learning Experiences.—Each learning experience is preceded by an **overview.** The overview serves as a table of contents for each learning experience, giving the teacher a brief summary of what he/she will be doing in the learning activities for that experience. This summary will help the teacher decide whether he/she needs to complete the learning experience, or portions of it. Sample 5 shows an overview from Module C–8.

SAMPLE 5


Enabling Objective
Activity
Optional Activity
Activity
Feedback

OVERVIEW

Learning Experience I

OVERVIEW

After completing the required reading, demonstrate knowledge of problem-solving techniques and how to use problem-solving as an instructional method.

You will be reading the information sheet, Directing Students in Applying Problem-Solving Techniques, pp. 6–15.

You may wish to view a locally-produced videotape of a teacher directing students in applying problem-solving techniques, and to critique that teacher's performance.

You will be demonstrating knowledge of problem-solving techniques and how to direct students in applying these techniques by completing the Self-Check, pp. 17–18.

You will be evaluating your competency by comparing your completed Self-Check with the Model Answers, pp. 19.

Following the overview, the teacher is led through the learning experience step-by-step via detailed directions for each **learning activity** to be performed. Some learning activities provide the teacher with the necessary knowledge or background information concerning the competency. These activities may include—

- reading an information sheet or outside reference
- observing an experienced teacher
- viewing a film, filmstrip, or videotape
- discussing with peers or persons with expertise, etc.

Other learning activities give the teacher the opportunity to practice or apply the competency. These activities may include—

- role-playing with peers
- reacting to case studies
- critiquing videotaped performances
- planning in writing
- operating equipment, etc.

In the final learning experience, the teacher puts this knowledge and practice to use in performing the competency in an actual school situation.

Information sheets, self-check devices, case studies, planning and critiquing forms, etc., are included in the module; resources such as videotapes or optional references need to be secured through the resource person. If the activity involves observation of experienced teachers and/or role-play with peers, the resource person also needs to help the teacher to make the necessary arrangements.

For example, in the module *Direct Students in Applying Problem-Solving Techniques*, directions for reading an information sheet immediately follow the overview for Learning Experience I. The information sheet is included in the module. After the information sheet, an optional activity is suggested—viewing a locally-produced videotape. If the teacher chooses to complete this activity, he/she needs to check with the resource person to secure the videotape as well as the necessary facilities and equipment for this activity in advance. (See Samples 6 and 7.)

Many learning experiences suggest **optional activities** designed to **supplement** and **enrich** the teacher's learning experience. These can include reading outside references, interviewing experienced teachers, discussing concepts or concerns with peers, observing skilled teachers, participating in role-plays, etc.

SAMPLE 6

INFORMATION SHEET

Activity

For information explaining the steps involved in the problem-solving process and describing how to use problem-solving as an instructional method, read the following information sheet:

DIRECTING STUDENTS IN APPLYING PROBLEM-SOLVING TECHNIQUES

Many situations in life present problems that need to be solved. A problem exists in any situation in which there is a difficulty or uncertainty which needs some creative or logical solution.

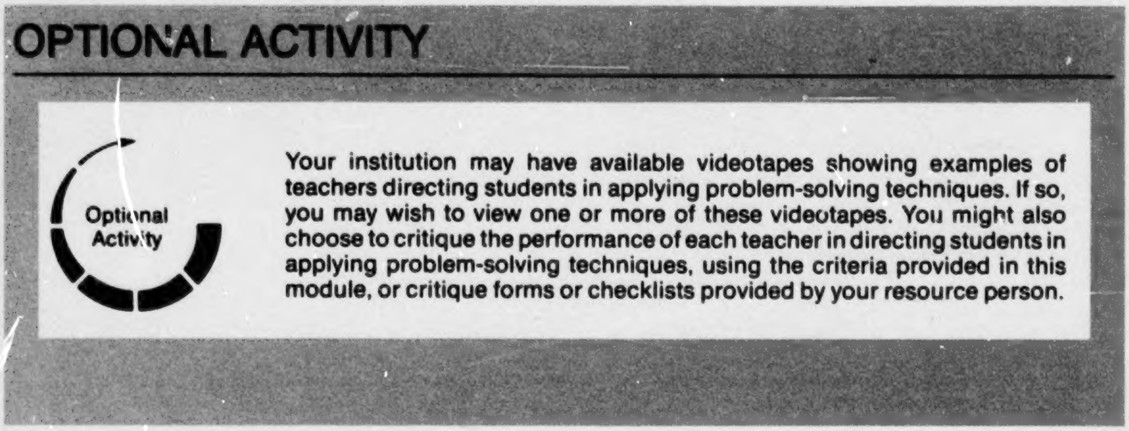
Problems that need solutions can arise in one's home life as well as on the job. For example, how can a family with a limited income use their finances to provide adequately for food, shelter, and clothing and still have funds available for recreational purposes? How can an employee deal with a supervisor who is unknowingly creating friction between the members of his/her staff? In order to deal with these problems that arise, a rational and organized approach is needed which can be applied in developing solutions to these

4. examining possible solutions to the problem
5. selecting a tentative solution or alternative solutions
6. testing the proposed solution(s)
7. assessing the results of the testing

The following example illustrates the problem-solving approach: Mr. O'Leary, a recently employed teacher, has the option of enrolling in a group medical benefits program. The program has two plans from which he may select. Mr. O'Leary wants to enroll, but is unsure of which plan would be most suitable for his situation.

First, he analyzes the situation in terms of his estimated immediate and future medical needs and those of his spouse and children. As a result of this analysis, he is able to compile a list of his family's possible medical needs.

SAMPLE 7



OPTIONAL ACTIVITY

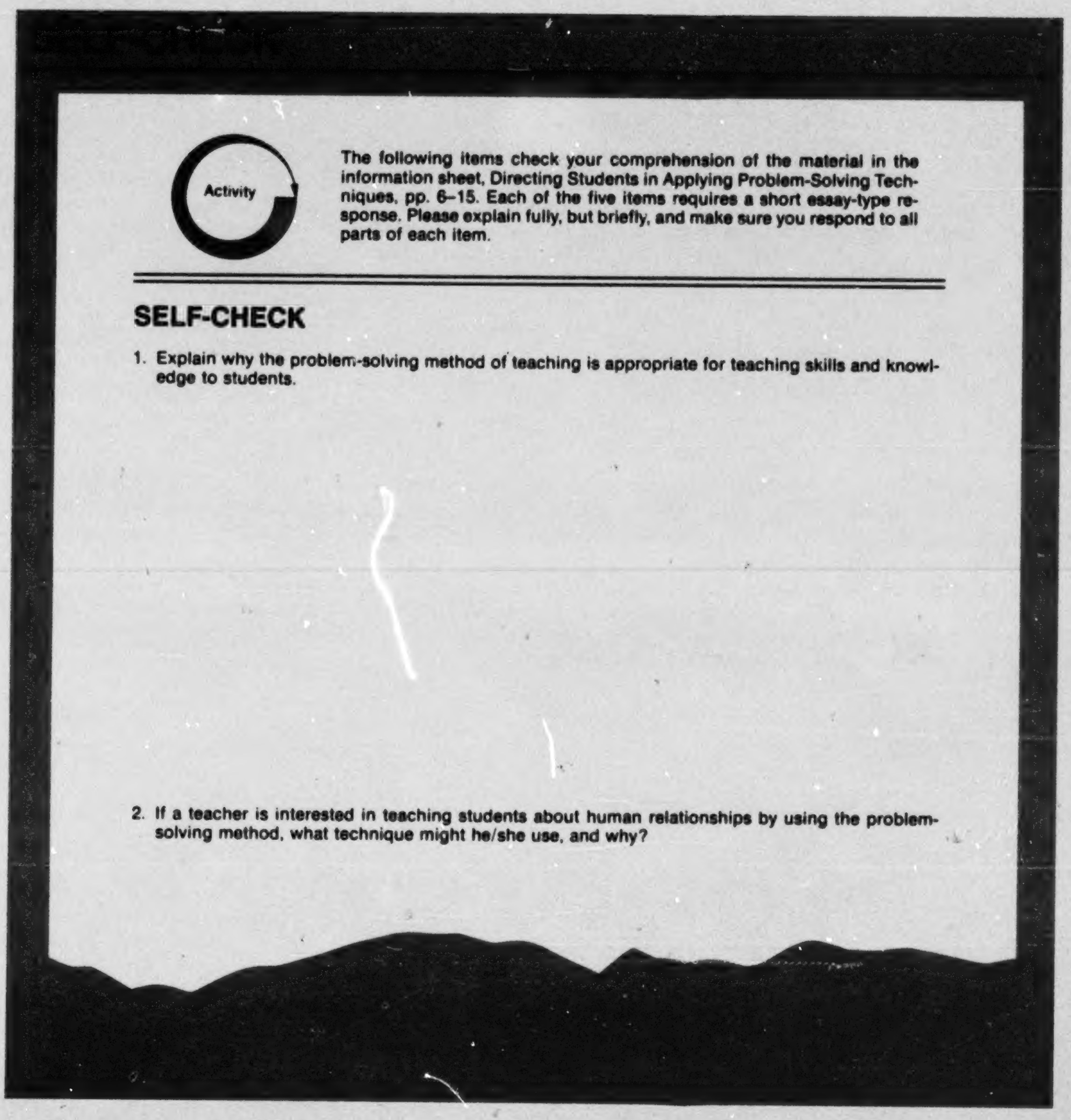
Optional
Activity

Your institution may have available videotapes showing examples of teachers directing students in applying problem-solving techniques. If so, you may wish to view one or more of these videotapes. You might also choose to critique the performance of each teacher in directing students in applying problem-solving techniques, using the criteria provided in this module, or critique forms or checklists provided by your resource person.

Toward the end of each learning experience, the teacher will get **feedback** on how well he/she is doing. It may be in the form of a self-check with model answers; a model critique of a case study; or a checklist for the teacher, peer(s), and/or resource person to use in rating the teacher's achievement. Feedback devices, along with the directions for their use, are always on a separate page(s) to facilitate their use.

Most **self-checks** are in the form of essay questions (see Sample 8), although some modules include self-checks in the form of worksheets to be completed, case studies to be reacted to, matching questions, etc. Model answers are always provided for the questions asked in the self-check.

SAMPLE 8



Activity

The following items check your comprehension of the material in the information sheet, Directing Students in Applying Problem-Solving Techniques, pp. 6–15. Each of the five items requires a short essay-type response. Please explain fully, but briefly, and make sure you respond to all parts of each item.

SELF-CHECK

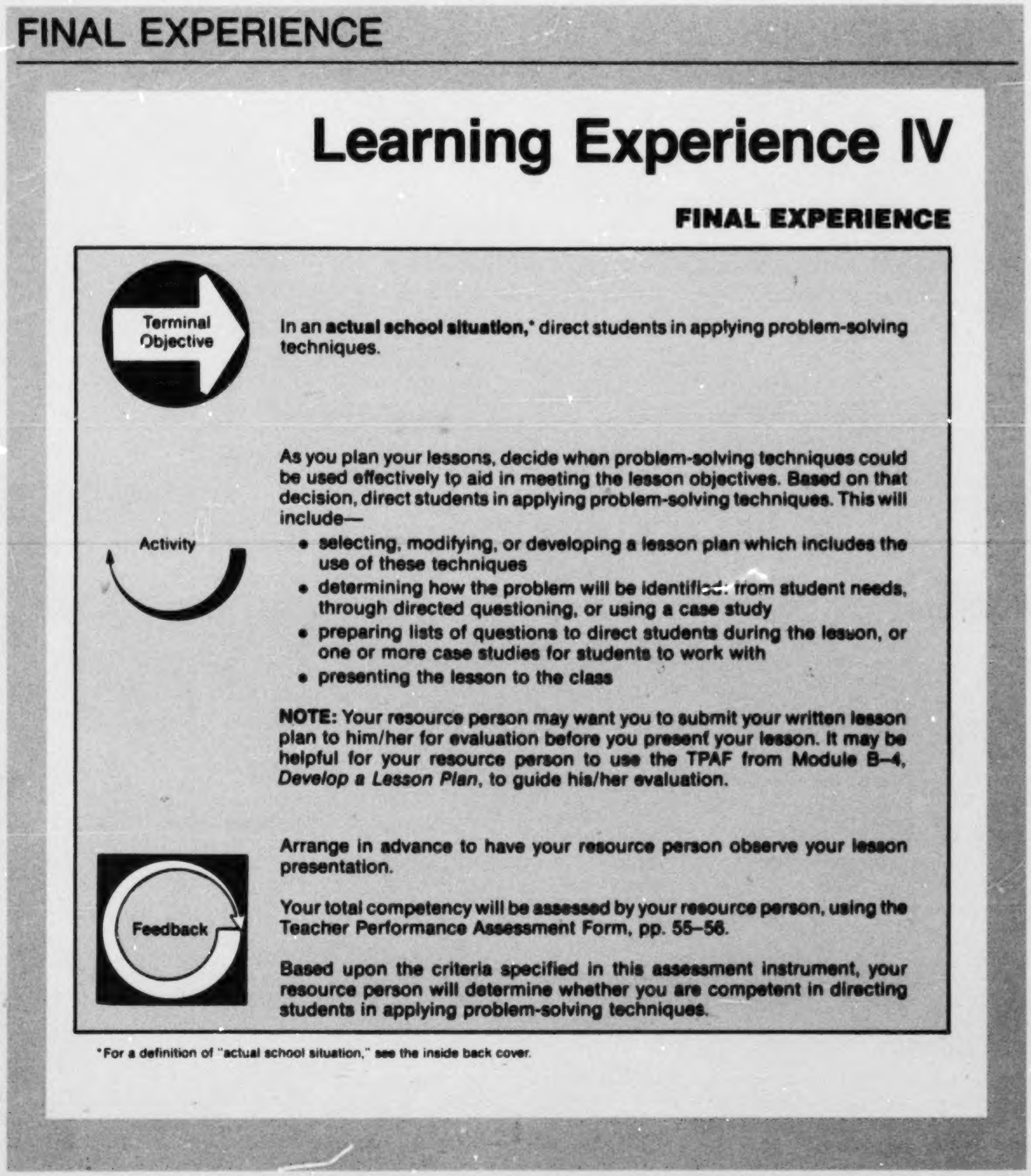
1. Explain why the problem-solving method of teaching is appropriate for teaching skills and knowledge to students.

2. If a teacher is interested in teaching students about human relationships by using the problem-solving method, what technique might he/she use, and why?

The final experience of each module in The Center's curriculum always requires the teacher to demonstrate the competency in an actual school situation. (See Sample 9.) There is no overview for this experience, nor any detailed directions. It is assumed that if the teacher is ready for the final experience, he/she knows what is involved in performing the competency.

The teacher's performance is assessed by you, the resource person, using the Teacher Performance Assessment Form provided in the module. (See Sample 10.) This assessment form lists the criteria on which the teacher's performance will be judged, and provides a scale for indicating how well the teacher has performed on each component.

SAMPLE 9



FINAL EXPERIENCE

Learning Experience IV

FINAL EXPERIENCE

Terminal Objective

In an **actual school situation,*** direct students in applying problem-solving techniques.

Activity

As you plan your lessons, decide when problem-solving techniques could be used effectively to aid in meeting the lesson objectives. Based on that decision, direct students in applying problem-solving techniques. This will include—

- selecting, modifying, or developing a lesson plan which includes the use of these techniques
- determining how the problem will be identified: from student needs, through directed questioning, or using a case study
- preparing lists of questions to direct students during the lesson, or one or more case studies for students to work with
- presenting the lesson to the class

NOTE: Your resource person may want you to submit your written lesson plan to him/her for evaluation before you present your lesson. It may be helpful for your resource person to use the TPAF from Module B-4, *Develop a Lesson Plan*, to guide his/her evaluation.

Feedback

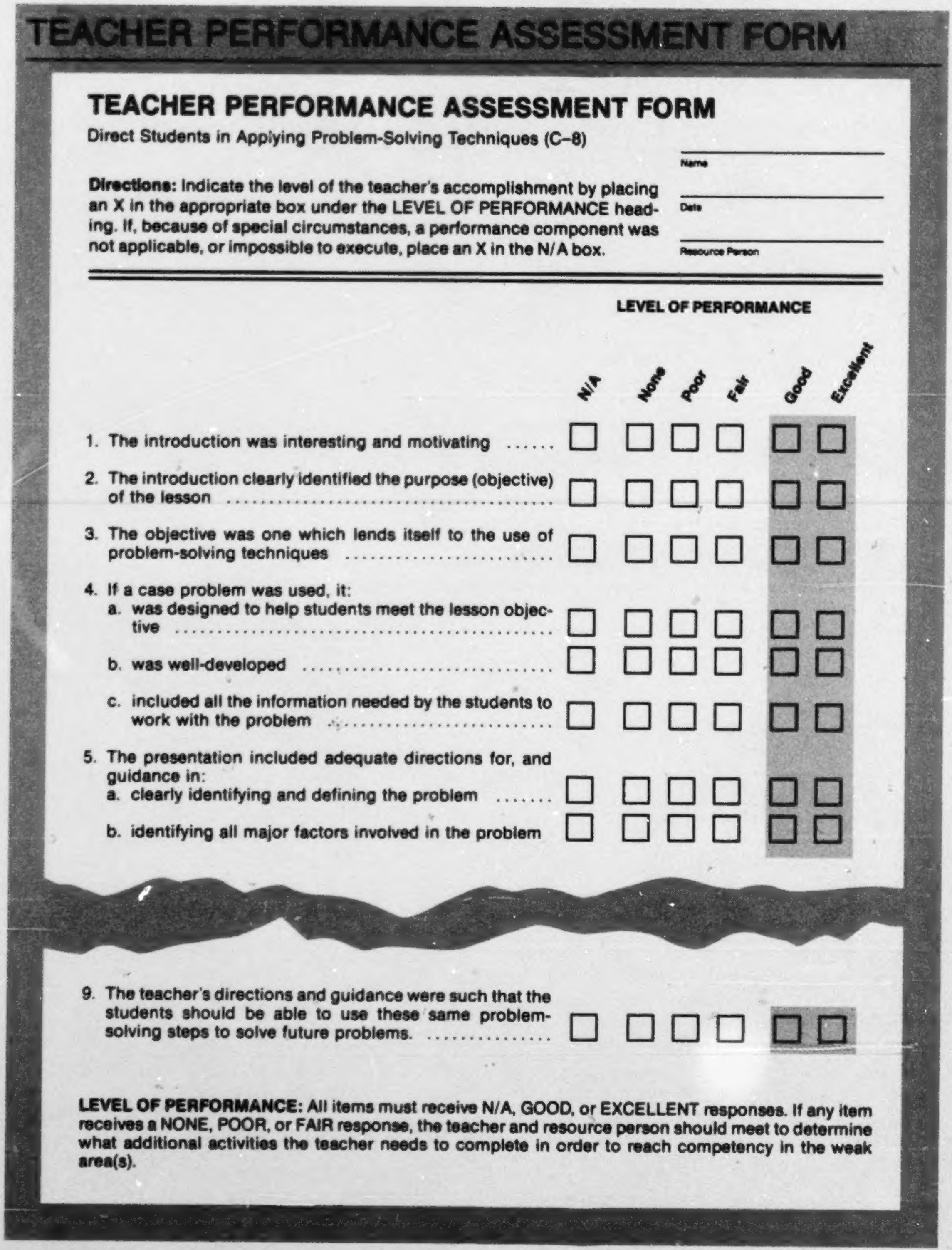
Arrange in advance to have your resource person observe your lesson presentation.

Your total competency will be assessed by your resource person, using the Teacher Performance Assessment Form, pp. 55–56.

Based upon the criteria specified in this assessment instrument, your resource person will determine whether you are competent in directing students in applying problem-solving techniques.

*For a definition of "actual school situation," see the inside back cover.

SAMPLE 10



TEACHER PERFORMANCE ASSESSMENT FORM

TEACHER PERFORMANCE ASSESSMENT FORM

Direct Students in Applying Problem-Solving Techniques (C–8)

Name ____________

Date ____________

Resource Person ____________

Directions: Indicate the level of the teacher's accomplishment by placing an X in the appropriate box under the LEVEL OF PERFORMANCE heading. If, because of special circumstances, a performance component was not applicable, or impossible to execute, place an X in the N/A box.

LEVEL OF PERFORMANCE

	N/A	None	Poor	Fair	Good	Excellent
1. The introduction was interesting and motivating	☐	☐	☐	☐	☐	☐
2. The introduction clearly identified the purpose (objective) of the lesson	☐	☐	☐	☐	☐	☐
3. The objective was one which lends itself to the use of problem-solving techniques	☐	☐	☐	☐	☐	☐
4. If a case problem was used, it:						
a. was designed to help students meet the lesson objective	☐	☐	☐	☐	☐	☐
b. was well-developed	☐	☐	☐	☐	☐	☐
c. included all the information needed by the students to work with the problem	☐	☐	☐	☐	☐	☐
5. The presentation included adequate directions for, and guidance in:						
a. clearly identifying and defining the problem	☐	☐	☐	☐	☐	☐
b. identifying all major factors involved in the problem	☐	☐	☐	☐	☐	☐
9. The teacher's directions and guidance were such that the students should be able to use these same problem-solving steps to solve future problems.	☐	☐	☐	☐	☐	☐

LEVEL OF PERFORMANCE: All items must receive N/A, GOOD, or EXCELLENT responses. If any item receives a NONE, POOR, or FAIR response, the teacher and resource person should meet to determine what additional activities the teacher needs to complete in order to reach competency in the weak area(s).

Chapter II

THE RESOURCE PERSON'S RESPONSIBILITIES

You, as a resource person, are the single most important factor in conducting an effective performance-based teacher education program. Curriculum materials especially designed for PBTE programs are important; a well-planned and structured PBTE program is important; physical resources in terms of facilities and equipment are also important. However, without knowledgeable and competent professional educators assisting, guiding, evaluating, interacting, and helping the individuals pursuing the program to develop the desired teacher competencies, continued effective development of teaching skills will not occur. It is this interpersonal dimension, so important to the individualization and personalization of the program, that the resource person must fulfill.

In carrying out the responsibilities of the resource person, it is necessary to function in several different roles. First of all, the resource person may need to wear the hat of the **advisor.** In the advisory role, the resource person's responsibilities will include: (1) interpreting the PBTE program to the pre- or inservice teacher, (2) assisting in selecting appropriate skills for the teacher to pursue, and (3) assisting the teacher in determining what prerequisites should be pursued.

A second role of the resource person is that of **helper** or facilitator. In this helper role, the resource person provides assistance to the teacher when assistance is needed. Such assistance may include: (1) answering the teacher's questions, (2) suggesting additional and/or optional resources and learning activities, and (3) arranging for teacher access to materials, equipment, and teaching settings when needed.

A third major responsibility of the resource person is that of **evaluator.** Evaluation responsibilities will include: (1) interacting with the teacher regarding the teacher's own self-evaluations, (2) helping the teacher evaluate materials or products produced and, perhaps, videotapes of his/her own performances, and (3) assessing the teacher's performance of the desired teaching skill (terminal objective) in an actual teaching setting.

It should be noted that the number of functions performed by you as resource person will depend upon the structure of the PBTE program with which you are working as well as the staffing pattern employed. In some inservice PBTE programs, a field resource person or the local director of professional development may have the entire responsibility for providing all of the guidance, help, and evaluation assistance to the teacher for the entire program. In other program structures, part of the responsibility for providing assistance to the teacher may be given by resident resource persons or master teachers within the teacher's own school.

In some preservice PBTE program structures, on-campus teacher educators may serve as resource persons while the preservice teachers are on campus pursuing a number of modules up to the final learning experience (performance of the competency in the actual school situation). A cooperating teacher, a clinical professor, a master teacher, or a resident resource person may then assume the resource person's responsibilities for guiding, assisting, and evaluating the teacher's performance in the actual teacher role during a field experience program.

Regardless of the extent of your responsibility as resource person, the role requires your commitment as a highly professional educator to promoting and improving the teaching profession. You can do this by providing guidance, assistance, and professional judgment in helping others develop the desired level of professional competency.

This section of the resource person guide is designed to help you function effectively as a resource person. Responsibilities of the resource person are discussed more fully in relation to each of several functions of the resource person, and techniques and procedures are suggested to assist you in the resource person's role.

Planning the Teacher's Program

Teachers entering into a performance-based teacher education program may very well find the concepts quite new and different from those of the subject-centered, group-oriented types of instruction to which they have been accustomed. You may be the first to explain the program to the teacher. If not, teachers still are likely to have many questions about the program as you serve as resource person to them. You will also need to assess the needs of each individual teacher or of the group relative to the planned program, and then help the teachers plan a program of competency development.

Interpreting the Program for the Teacher

One of the first questions a teacher is likely to ask is "What is PBTE?" *The Student Guide to Using Performance-Based Teacher Education Materials* (Appendix F) has been developed to answer that question and many more questions about PBTE, modules, and how to use them. You should see that each of your teachers has a personal copy of the student guide. A color slide/tape presentation has also been developed to assist in orienting preservice and inservice teachers to PBTE and the curricular materials.

You should also provide materials that explain **your specific program** of PBTE. Will the teachers be required to complete an entire PBTE program of specified modules? Is there a cluster of modules that is being substituted within an existing course structure to fully or partially replace conventional instruction? What modules are required of every teacher; that is, what modules form the basic "core" of the PBTE program or of your course? What modules are optional? When do they start taking modules? Where? How long does it take? How do they test out of modules? How will they be graded?

Answers to these and many more questions must be provided for your teachers in your specific program and setting. A description of your program or course, including graphic explanations, will help you to interpret your program, the teacher's role, and your role to your teachers. A *Guide for Implementing Performance-Based Teacher Education Programs* is available to help teacher education planners design PBTE programs and develop answers to these questions.

Assessing the Teacher's Needs

Whether you are incorporating modules within your existing course structure or within a specifically designed PBTE program, some decision will need to be made concerning which modules specific individuals should take and, perhaps, the order in which they should be pursued. In a preservice PBTE program, you may be able to assume that most of your teachers will need all of the core or required modules and, with few exceptions, should probably pursue the modules in an established sequence identified in the program or course description.

For inservice teachers and some preservice teachers, such an assumption may not be true at all, for the individual may have developed adequate competence in several teacher tasks through on-the-job teaching experience and prior preparation for teaching. You will need to assess each individual's need for the required competencies and, if appropriate, the individual's need for the optional competencies available through your program.

As a preliminary indication of competencies which individuals might already possess, you can ask teachers to review the listing of competencies or modules in your course description or PBTE program description, and to check those in which they feel they have some degree of competence. You may then, through questioning, determine the nature and extent of experience or training they have had in order to help them decide whether to attempt to "test out" of these modules.

A listing of module titles, accompanied by the enabling objectives and the terminal objective for each module, is included in Appendix C. You and the teacher should examine the objectives for each module in question to gain additional insight and further explanation of the nature of the performance required in the module.

Before a final decision is made that an individual is to attempt to test out of a module without taking the module, you should direct the person to examine closely the criteria on the Teacher Performance Assessment Form in the final learning experience of the module in question. When you make it clear that these are the criteria against which his/her performance will be judged, there should be little question in the teacher's mind regarding his/her readiness to perform the competency satisfactorily.

Selecting a Program of Competencies and Modules

A preservice PBTE program may be rather rigidly structured with limited latitude for selection of the sequence of modules to be taken. More flexibility will likely be available for the inservice teacher who will have some degree of competency in a number of areas and, therefore, less need for a sequence of prerequisite modules.

In helping inservice teachers select a program of modules, you should build on their interests and what you know about their teaching strengths and weaknesses. You should try to start with a module that is likely to yield quick returns in terms of improved teaching and satisfaction on the part of the teacher. For example, if the teacher's lesson introductions are weak (or missing) and students display a lack of interest and enthusiasm, then Module C–10, *Introduce a Lesson*, may be a good place to start, perhaps followed by Module C–12, *Employ Oral Questioning Techniques*.

These modules should then be listed on the Personal Progress Record contained in the student guide (see Appendix F, Sample 2). These modules would be followed by other high priority modules, and then, perhaps by modules required to complete a core of competencies.

As modules are selected for an individual's program, it is important that prerequisite competencies for each module are considered and included in the plan. Prerequisite competencies, in terms of other Center modules, are shown in chart form for all 100 modules (see inside back cover of the student guide, Appendix F) to aid in quickly identifying prerequisites for any one or more modules.

Effort has been made to maximize flexibility in planning PBTE programs by designing modules with as few prerequisites as possible. Some sequencing of modules is required, however, to avoid repetition of learning experiences among closely related competencies, and to effectively relate to, and build upon, more basic competencies. It should be emphasized that, although prerequisites are shown in terms of module numbers, competencies that teachers possess should be recognized regardless of whether they were developed through module use or by other means of instruction.

You should make a copy of each teacher's program for your use in monitoring and recording progress as you work with him/her. You may gain some indication of the time required to complete each module by examination of the time estimates determined for the field-test version of the modules (see Appendix D). Remember, two or more modules can be effectively pursued by a teacher at the same time. This is especially true for closely related modules such as *Write a Lesson Plan*, *Introduce a Lesson*, and *Summarize a Lesson*. This enables the teacher to attempt to test out on these two or more competencies in **one** actual school performance.

The competencies in your PBTE program may be listed in the form of performance elements derived from the 384 which serve as the basis for The Center's PBTE modules. If this is the case, you will need to help teachers select The Center's PBTE modules that deliver on the required performance elements. Since each module carries the number of each performance element covered by the module (e.g., Module C–10, *Introduce a Lesson*, covers performance element No. 100), you can identify the elements by matching the performance element number(s) in the About This Module section with the listing of the 384 elements in Appendix B of this guide.

Guiding the Learning Activities

Helping the Teacher Select Learning Experiences

You may have assisted your teachers in selecting the module or modules most appropriate to their immediate competency needs, or you may be helping teachers pursue a prescribed sequence of modules. Whatever the case may be, flexibility is provided within each module for teachers to choose only those learning experiences necessary for their specific needs.

Each module includes a series of enabling objectives and learning experiences leading to the terminal objective and performance of the competency in the actual teaching situation. Prior study or experience may permit individual teachers to bypass those learning experiences in which they already possess the competency specified by the enabling objective. In the Procedures section of the inside back cover of each module, teachers are instructed to read the introduction to the module and to examine the module objectives as a first step in determining how much of the module they really need to complete in order to develop the specified competency.

You may need to encourage and assist the teacher in doing this, at least for the first few modules, or until you are assured that sound decisions and choices are being made. A teacher pursuing the module *Assess Student Performance: Knowledge*, for example, may very well say to you, "I know all about objective tests; I had a lot of practice making these up when I was a teaching assistant; therefore, I don't need to do Learning Experience I."

You may ask two or three well-chosen questions to determine if the teacher does indeed have a firm grasp of the needed information presented in the first learning experience and is ready to proceed to other learning experiences covering other information or requiring application of the knowledge. Again, it is necessary that you be thoroughly familiar with the content of the module and module resources in order to provide the necessary guidance to the learner in selecting or omitting learning experiences.

Reading the Information Sheet

You may be able to assist learners in getting the most out of the information sheets by suggesting procedures to follow in studying the information provided. A procedure for studying information sheets which many find effective is to (1) read through the entire information sheet to get a "feel" for all of the concepts presented, (2) study the information sheet, section by section, and respond to the self-check questions or activities presented, and (3) after comparing the self-check responses with the model answers, reread those parts of the information sheet which were not understood or about which there were questions.

Consulting with the Teacher on Self-Checks and Other Feedback Devices

Feedback activities in the module learning experiences often direct the teacher to " . . . consult with your resource person." Module design is intended to encourage self-evaluation and to develop teachers' skill in self-evaluating their teaching performance. The majority of teachers taking modules appear to like the self-checks and carry them out conscientiously and successfully. However, teacher interaction with a knowledgeable, competent professional is often needed for reinforcement, clarification of concepts in the context of the specific setting, and answering any of several types of questions regarding the teacher's own evaluation.

Teachers' need for consultation and discussion will often occur when comparing their own answers on a self-check with the model answers provided in a learning experience. Questions will also arise when teachers compare their own critique of a case situation to the model critique provided. You should be prepared to clarify points that are unclear and, perhaps, provide additional examples or explanation in terms of the specific instructional setting or your own particular service area. You may need to suggest that the learner pursue optional readings suggested in the learning experience, or you may suggest other references or materials with which you are familiar and which give a more in-depth discussion of the points in question.

Sometimes, teachers are overly critical of their own responses; you may need to call their attention to the statement under the Level of Performance at the end of the model answers which tells students that their responses should have covered the same **major points** as the model answers. The model answers often go into much greater depth than the teacher is required to achieve in his/her responses.

Some persons will short-circuit part of the needed learning activity by going directly from the information sheet to the model answers without completing the self-check. Although this procedure will likely result in some learning and reinforcement, much opportunity for learning is lost by omitting the study, review, analysis, and synthesis of information necessary in formulating responses to self-check items and in critiquing case situations.

When it becomes evident that an individual needs to be pursuing the full learning experience, but lacks the self-discipline to do so, model responses and model critiques can be removed from the module. These can then be provided to the teacher when the teacher has presented a completed self-check which displays his/her honest efforts and ability. Another approach which you might find useful is to orally pose other self-check questions or situations which will make it evident to you and to the teacher that he/she has not assimilated the necessary information or concepts.

Performing with Peer Groups

Critiques of simulated performances, role-playing, and discussions involving the use of peer groups are frequently suggested in module learning experiences. Sometimes, it is not possible or practical, especially for inservice teachers, to have peers available for participation in the learning experiences as suggested. Whenever the use of peers is required, alternate activities not requiring the use of peers are always provided for those finding the use of peers impractical

Encouraging Peer Interaction

You, as a resource person, should encourage the use of peer groups because of several advantages they offer to teachers pursuing modules. Teaching is largely an interactive process; therefore, we should provide ample opportunities for interaction for those preparing to teach. Participation in small groups, allowing each teacher to learn through the successes and errors of other group members, may prove to be the most efficient use of teacher time since fewer practice trials are required on the part of each individual. In the same way, role-playing activities involving small groups allow all members to benefit from the experience, regardless of the specific role played by each member.

Providing Feedback

In deciding whether to be present when a teacher's performance is being critiqued by peers, the resource person will need to use professional judgment, assessing the maturity of the groups as well as the nature of the performance. Critical comments or ratings by peers could develop into a very traumatic experience for a timid or sensitive individual, with the outcome being a negative rather than a positive learning experience for the teacher. The resource person needs to be aware of such potential situations and be ready to temper the tone of discussion and critiques, supplying positive feedback, support, and encouragement as needed.

Arranging Observation and Interview Activities

In the development of some competencies, such as using oral questioning techniques, observing the actual classroom performance of a real professional may be the ideal learning activity. In other cases, such as organizing the vocational laboratory, the chance for the teacher to interview a professional in his or her own laboratory is ideal. During the teacher's field experience program, you may have little difficulty in arranging for your student teacher to observe you and to observe and interview other teachers within the local school.

The inservice teacher pursuing modules may have much less time for observation of other teachers because he/she is carrying a full teaching load. You will, therefore, need to assist the teacher in finding worthwhile opportunities to observe other teachers during planning periods and free periods. This help will be especially important until the inservice teacher develops a rapport with some of the better teachers in the local school and in nearby schools. Your assistance in making or encouraging arrangements can help new teachers overcome hesitancy in contacting other professionals and making their needs known. It will also help to make such observations and interviews truly professional growth experiences.

For on-campus preservice teachers pursuing modules, making satisfactory arrangements for observation of, and interviews with, on-the-job teachers prior to the field experience portion of the program can pose more difficult problems. We must guard against excessive disruption of normal school activities and demands upon the time and hospitality of teachers in schools which happen to be located near the campus. Large numbers of individuals contacting a local teacher and school would very quickly wear out their welcome.

Several approaches can be taken to provide excellent opportunities for teachers pursuing modules to observe or interview top teachers. Some of these are—

- Make one or more videotapes of the specific teacher performances the teachers need to observe.
- Make video or audiotapes of one or more individuals conducting the needed interview with the teacher.
- Bring highly competent teachers onto the campus for interviews with large groups of teachers concerning one or more module learning activities.
- Arrange group field trips to one or more nearby schools for observation and interviews.
- Use color slides to illustrate specific considerations such as storage of materials and equipment in the vocational laboratory.
- Identify observation and interview activities needed in a number of modules **prior** to teachers spending a week or two in the field for observation purposes.

You perhaps can add several more suggestions to these which may be appropriately used in your specific setting. /

Arranging Videotaped Performances

Videotapes of the teacher's performances can provide excellent feedback to the learner and to you in assisting the learner to evaluate and improve performance. Judicious use of microteaching, focusing upon single key teaching performances, can add immeasurably to effective learning and the development of teaching skills.

Many on-campus learning centers and local schools provide videotape equipment for use in the professional development of teachers. Module learning experiences often suggest videotaping learner performances as optional learning activities. If you and your teachers have access to videotape equipment, you are encouraged to take advantage of this excellent teaching-learning tool.

Video performances are time-consuming for the performer, the peers who serve as the performer's "students," and you as the resource person who may need to make all arrangements for equipment, space, scheduling, and analysis of the videotape with the performer. It is, therefore, essential that videotaping be used only in those teacher performances in which it can provide the most effective form of feedback. Using videotaping for feedback on performances such as lesson introductions, lesson summaries, and oral questioning can be very effective and, thus, appropriate. However, its use for lesson planning, supervising student study, and writing a news article would be inappropriate.

Use of videotapes for self-analysis may not be new to some persons using modules; however, some may need more introduction to the equipment and to the reality of seeing themselves on television. You may find the use of Module C–27, *Present Information with Televised and Videotaped Materials*, appropriate for introducing learners to the equipment and its proper use. Each individual should have the opportunity to view and hear himself/herself on the television monitor long enough to ensure that the novelty has worn off prior to his/her first taping session. The teacher needs to become acquainted with that strange image and voice which turns out to be his/her own.

Following the first one or two taping sessions, you may want to give the performer the opportunity to privately view the tape prior to discussion of his/her performance with you and/or peers. If this performance is very poor and the weakness is obvious to the performer, you may need to give the teacher the opportunity to redo the performance prior to evaluation and the discussion of evaluation forms.

Inservice teachers and student teachers may often make their own arrangements to use the school's videotape equipment for taping entire class sessions or specific activities for which feedback is desired. For others, portable equipment might be periodically made available to the teacher and resource person.

Your scheduling of the use of videotape equipment on campus will certainly be influenced by the availability of the equipment and space, and any rules and constraints regarding its use. You should be able to adapt the system of scheduling peer interactions to include sign-ups for videotaping sessions. Often, activities suggesting the use of small peer groups also suggest videotaping for use in discussions and evaluation of the experience.

Reviewing Teacher's Written Products

The more immediate the feedback you provide learners, the more effective you can be in improving their performance. This holds true for written performances such as the development of lesson plans, proposed publicity items, or a letter to advisory committee members. Teachers can easily lose interest if their written work does not receive your evaluation and feedback soon after it has been completed.

Quality checklists are usually provided in module learning experiences requiring written products, and teachers are instructed to evaluate their own work with the suggestion that they see their resource person if they have questions about the written product or the evaluation. In some learning experiences, the teacher is instructed to present his/her work to the resource person for evaluation. You can help make this procedure work effectively for the learner by ensuring that when work is turned in, you are available to check it yourself, or to review and make comments on self-evaluations shortly after the materials are dropped in your "in" box.

When your written comments are not sufficient, and it is evident that the individual needs more help, then a "See Me" note can be attached to the materials before placing them in the "out" box. The teacher can then make arrangements to discuss the activity with you.

Assisting with Projects and Displays

When module learning experiences call for the development of a project or a display, you as the resource person should make sure that all needed materials and equipment are available, and that necessary space is provided for the display of the materials developed. For example, the development of a bulletin board display for creating interest in a unit of instruction may require several different types and colors of paper and cardboard, lettering devices, cutting equipment, colored pens, and a place to display the finished products for critique and evaluation.

For the inservice teacher and the preservice teacher in a field experience program, these requirements may be readily found within the school, and you will need only to assist them in finding out where they are located and how to gain access to them. Many teacher education departments make these materials available to individuals within the department or through the bookstore. You need to make this information available to your teachers and to provide the necessary space for display and critique purposes. You may need to develop a schedule for use of the display area in order to accommodate everyone's needs.

Assisting Teachers in Working in College Classrooms and with Community Groups

You may be able to expand limited opportunities for on-campus preservice teachers to practice or demonstrate teaching competencies in an actual school situation by taking advantage of teaching-learning settings in college classrooms. You can help teachers make arrangements for participation in the instruction of some of their own and other technical subject matter courses.

Considerable caution should be exercised in this situation to avoid placing teachers in a completely foreign environment resulting in invalid assessments of their abilities as teachers. You may need to approach college instructors whom you know and in whose courses you recognize opportunities for your teachers to make presentations. Opportunities can be sought for students (1) to demonstrate concepts, principles, or manipulative skills, (2) to present information through the use of one or more types of audiovisual equipment and materials, or (3) to assess student performance. Other opportunities to provide assistance should be explored for their potential in developing teaching competency and in making a contribution to the college instructor and the class.

If the competency to be practiced or demonstrated requires sustained contact with, and considerable knowledge of, the students, these teaching-learning settings would not, of course, be appropriate. In addition, assistance to your teachers should never interfere with normal progress of the college class.

You can also arrange for, and encourage your teachers pursuing modules to take advantage of, the numerous opportunities to participate in instructional roles with community groups. Opportunities to try out and practice a wide range of teaching skills are available with community groups such as Girl Scouts, Boy Scouts, church schools, 4-H Clubs, Rainbow, hobby clubs, avocational night courses, and adult education courses. You need to become aware of such opportunities in your community so that you can help your teachers take advantage of them as they pursue module learning experiences.

Helping Teachers Select Optional and Alternate Learning Activities

Optional learning activities generally appear in learning experiences to provide enrichment and reinforcement to the teacher. Alternate activities are provided as substitutes for required activities that might be highly desirable, but which may not be feasible in some settings in which the module will likely be used. As the resource person, you will need to use your knowledge of the setting and of the individuals' interests and needs, and your professional judgment in encouraging or sometimes requiring individuals to pursue certain optional or alternate learning activities. Of course, the best experience will result if you can lead the individual to personally make the decision most appropriate to the need and setting.

Remember that optional, situation-specific learning activities are always appropriate, and that you should supplement the module activities with readings, videotapes, slides, discussions, and other resources which are especially appropriate to your teachers' needs, to the setting, and to the service area.

Assessment of Teacher Performance: The Final Experience

As already discussed, in The Center's PBTE modules, assessment of teacher progress is almost a continuous process. Some of the feedback is provided by written model answers or model critiques which are immediately available to teachers upon completion of the learning activity. Feedback is sometimes provided to teachers through planning checklists or some other type of checklist which they use themselves to evaluate their lesson plans or other prepared materials. Additionally, feedback is often provided on at least one learning experience by one or more peers and/or the teacher's resource person.

The real test comes, however, when the teacher reaches the final experience in which he or she must demonstrate actual **ability to perform** the given competency under real school circumstances. The final experience also places special responsibility on the resource person, as it is he or she who must make as objective and as fair a decision about the teacher's competence as possible.

While the design of The Center's PBTE modules helps in the objective assessment of performance, much judgmental responsibility still has to be exercised by the resource person(s) making the final assessment. The resource person must also have the courage to insist that a teacher repeat a learning experience, or at least part of it, if in the final experience, the teacher's performance has **not** been an effective (satisfactory) one. Of course, it is best to suggest that the teacher do additional practicing or other preparation prior to demonstrating the final experience if you can detect that he or she is not yet ready. The remainder of this section addresses such issues as assessing teacher readiness, arranging teacher performance, and helping teachers recycle.

Assessing Teacher Readiness

Before arrangements are made for the preservice teacher, intern, or inservice teacher to demonstrate his/her competency in an actual school situation, the resource person should make an informed judgment about the teacher's readiness. If you, as the resource person, have been helping the teacher and monitoring his/her progress through the various learning activities, you should have a reasonably good idea of the teacher's likelihood of success.

Before scheduling a final assessment, however, it is recommended that a short conference be held with the teacher to review the teacher's progress and potential competency level by checking his/her performance on previous learning experiences. This can be done by reviewing the completed self-check(s), case study critiques, lesson plans or other materials developed, peer evaluations or simulated performance, etc. You may also wish to orally quiz the teacher to assess his/her cognitive understanding of important concepts and principles which are basic to performing the given competency in an effective manner.

If other resource persons have also worked with the teacher, you may want to check with them regarding their reactions to the teacher's readiness. Finally, you may want to ask the teacher to express his/her own feelings about how ready he/she feels. The amount of confidence, or lack thereof, expressed will often be a good indicator of the teacher's ability to perform effectively. With all of these suggested inputs or with as many as are available, you should have no difficulty in making a well-informed decision about the teacher's readiness.

Arranging for the Final Assessment

Arranging for the final assessment will usually be very easy for an intern, student teacher, or inservice teacher. Except for summertime and vacation periods, numerous classroom, laboratory, and other school situations are usually readily available. It is mostly a matter of deciding on the date, time, and place.

On the other hand, in the case of preservice teachers, the resource person often has to either make the necessary arrangements or, at least, help make them. Resource persons usually know of nearby schools and vocational teachers who would be able and willing to help provide the necessary opportunities. Another option, and in most cases the preferred one, is that of deferring the final experience until the individual starts his or her student teaching or intern experience.

Once you and the teacher have agreed upon the desired date and time, arrangements should be made with the appropriate personnel and through the appropriate channels. Often, previous arrangements for student teaching, observational experiences, etc., have already been made with the approval of the local boards of education, superintendent, principal or vocational director, and selected vocational teachers. The same established channels and procedures will normally be adequate for setting up final experience assessments. Once approval has been obtained, such arrangements are usually quickly and informally made.

Using the Teacher Performance Assessment Form

The Teacher Performance Assessment Form, or TPAF as it is hereafter referred to, is always the last instrument in every module. It consists primarily of a series of performance-type statements which identify the essential criteria to be used for evaluating the teacher's final experience. Each TPAF also has four other components: (1) directions for its use; (2) space for recording name, date, and name of resource person; (3) a level of performance rating scale; and (4) a statement of the expected level of performance. (See Sample 10, p. 24.)

Identified by a title, the top of each TPAF has specific directions for its use by the resource person. The left-hand side of the form contains the list of performance components considered critical to successful demonstration of the specific competency in question. The number of criteria usually ranges from a minimum of about 10 items to as many as 30 or 35 items.

On the right-hand side of the TPAF, a level of performance scale indicates the various ratings—N/A, NONE, POOR, FAIR, GOOD, and EXCELLENT—that can be given to each item. In order to help ensure uniformity in the ratings used, each of the terms are defined as follows:

N/A . . . The criterion was not met because it was not applicable to the situation.

None . . . No attempt was made to meet the criterion, although it was relevant.

Poor . . . The teacher is unable to perform this skill or has only very limited ability to perform it.

Fair . . . The teacher is unable to perform this skill in an acceptable manner, but has some ability to perform it.

Good . . . The teacher is able to perform this skill in an effective manner.

Excellent . . . The teacher is able to perform this skill in a very effective manner.

Observing the Teacher's Performance and Making the Assessment

The observation of teachers who are completing the final experience is one of the most important tasks a resource person must complete. The final experience of each module is the point at which the teacher is asked to "put it all together"—the cognitive knowledge, the proper attitudes, and the skills practiced in earlier learning experiences are now integrated into a meaningful, realistic, and, hopefully, very effective demonstration of competency.

The teacher will, in most cases, have worked hard to prepare herself or himself for this demonstration, and it is very important that you as a resource person observe the total performance if at all possible. At this point, the resource person needs to be an "active listener/observer" and as objective as possible.

Although the specific situation and competency to be demonstrated will influence the observation procedure and the length of observation, several guidelines are offered to help ensure objective and fair observation.

- Be thoroughly familiar with the objectives and content of the module for which the teacher is completing the final experience.
- Be as familiar with the setting as possible. The more you know about the school, the class, the students, their regular teacher, etc., the better you will understand the environmental factors which might influence the teacher's performance.
- Be sure that the teacher knows in advance the criteria upon which his/her performance will be evaluated.
- During the observation, try to be as unobtrusive as possible so that the students do not overreact to your presence.
- Remember always that you are observing the teacher's performance in order to assess the teacher's skill in a given area rather than the teacher as a person.
- Try to observe more than one performance at any given observation period. Often, several competencies can be assessed during one visit or even one class period.

After the performance or performances have been completed, you should complete the TPAF(s) as soon as possible. You may also want the teacher to fill out the same form(s) at the same time as a kind of self-assessment. If at all possible, a conference should follow completion of the TPAF to discuss the various ratings given and the reasons for them. A resource person should exercise caution, and use tact and much human judgment during the assessment conference.

Teachers will, in some cases, be "uptight" about performing, and some could have their anxiety levels raised to an unnecessarily high degree by caustic comments or failure to offer encouraging remarks where they are deserved. It is your responsibility as a resource person to set the tone of the assessment conference to ensure positive results in what, to many, may be viewed as a very threatening situation. It is an opportunity to really enhance the teacher-learner relationship if properly handled. Above all, strive for objectivity and fairness, while showing sincere concern for the teacher as a person.

Recycling Teachers

If a good job of assessing readiness for the final experience has been done, there should be few cases in which a teacher does not achieve the minimal level of competency the first time. However, if the objective assessment of a teacher's performance indicates that effective competency (at least a **good** rating on all applicable criteria) has not been achieved, then you should ask the teacher to repeat some of the module's learning activities, to do optional and/or enrichment type activities, or to complete whatever special learning activities you mutually deem appropriate for removing the deficiencies.

Before a teacher is asked to recycle, you should always carefully explain why you feel such action is professionally sound and necessary. While recycling may seem harsh treatment, in the long run the teacher and the profession of teaching will both be better off because of your insistence on quality in education.

Chapter III

MANAGING THE ROLE OF THE RESOURCE PERSON

The management of a performance-based teacher education program rests largely upon the shoulders of the resource person. In fact, the resource person becomes the individual who, in all likelihood, makes the program go. If you are to do an effective job with all the advising, helping, and evaluating tasks of the resource person, then the management of this role is a critical matter. You will need to know about the PBTE program procedures and the content of the modules. You will also need to budget your time, assess competencies, and keep records.

Acquiring Knowledge of Program Procedure and Module Content . . . Getting Ready

How might a resource person become knowledgeable about the program procedures and module content? Ideally, participation in a training workshop would be most preferred. Training sessions and discussions with others who have been trained and have served as resource persons in using these materials can also be very effective.

Regardless of who conducts the training, you need an understanding of the 384 performance elements, the ten categories, the 100 modules, module structure, and procedures for using modules. Chapter I of this guide and the appendix materials are provided to help you develop this understanding and for use as a reference. In addition, you need to become familiar with the general terms used in all modules. For example, "teacher" refers to the person who is taking the module; "student" refers to the secondary or post-secondary vocational students who will be taught by the teacher.

You will also need to have a thorough knowledge of each of the modules used in your program. The only way to gain this knowledge is to read through each module. As you read through each module, make a list of all the resources needed—textbooks, reference books, hardware, software, AV equipment and materials, etc.—so they can be made available to the teachers. (See Appendix E for a complete list of resources needed for all modules.) It is extremely difficult to monitor and provide learning experiences for teachers without all of the materials needed for each learning activity. Without a complete set of the materials, a resource person will only be guiding teachers through an amended version of the PBTE program. Too often, a resource person tries to implement a PBTE program without a thorough knowledge of the contents of, or the performance required by, each module.

Therefore, it is essential that a resource person (1) be knowledgeable about the total PBTE program, (2) be totally familiar with the terms used in each module, (3) have studied each module to be used, and (4) have acquired all of the resource materials required in every learning activity in each module. Without these four elements, it will be extremely difficult for a resource person to guide a teacher through the PBTE program. Something more than a superficial awareness of the content of each module is required of a resource person.

Scheduling

Scheduling Module Completion

In the operation of a PBTE program, one real difficulty is the problem of completing the modules in a reasonable period of time. The independent study and self-pacing aspects are considered strengths in the program, but at some point a teacher must be expected to have completed a specified number of competencies. There is a tendency for some teachers to postpone final assessments and to allow uncompleted modules to stack up. This poses serious problems for both the teacher and the resource person; it soon becomes difficult, if not impossible, to schedule the needed performances into the short remaining period of time. You, as the resource person, need to provide guidance to prevent this from becoming a serious problem.

The PBTE program may be used with both preservice and inservice teachers, and the resource person must be aware of, and sensitive to, the differing requirements of these two groups. In scheduling time for module completion, it is important to consider the individual teacher. A module worksheet is included in the student guide (see Appendix F, Sample 1) for use in helping teachers set goals for module completion and to assist in helping them move toward those goals. When a teacher has established realistic target dates and has written them down, these dates can serve as a motivational force for completion of each module.

Scheduling Consultation Hours

Generally, a resource person will have more responsibilities than simply monitoring the PBTE program for teachers. Therefore, a vitally important aspect to consider is the scheduling of a resource person's time. Since teachers may complete modules on an individualized basis and at their own pace, it becomes important in the management of time that a resource person have some control. If not, the resource person will find every working hour of every day devoted to advising, evaluating, and guiding teachers.

Consequently, a resource person should provide teachers with a schedule of times when he/she is available for consultation or advice. In the event that more than one person is a resource person, time should be scheduled in such a manner that there is a resource person available throughout each working day. This maintains the concept of individualization and self-pacing in that evaluation is available for teachers at all times. It must also be noted that, in every module, the final experience always takes place in an actual school situation with a resource person assessment. This makes consultation scheduling a must for the smooth oepration of a PBTE program. Sample 11 is suggested as a possible device to use in scheduling a resource person's time.

SAMPLE 11

Posting a schedule, such as the one shown in Sample 11, in a location accessible to all teachers allows them to schedule themselves with a resource person as necessary. A scheduling scheme for both resource persons and teachers to use for individual consultation and/or observation of performance is an important phase in the management of a PBTE program.

Scheduling and Organizing Peer Groups

When a learning activity calls for the involvement of peers (usually 1–5 persons), problems can arise in ensuring that peers are available when and where needed, and are prepared to participate. One approach to this problem is to use sign-up sheets on the scheduling board in the resource or learning center. The individual first ready for the involvement of peers in a learning activity puts up the sign-up sheet listing his/her name, the module number, and the learning experience number which he/she is ready to pursue. A suggested date and time should also be shown.

For example, if the individual is ready to demonstrate a manipulative skill to a group of peers as suggested in Learning Experience II of the module *Demonstrate a Manipulative Skill*, the sign-up sheet might read—

Module C-16	Learning Experience II	Demonstrate a Manipulative Skill
Time Block	Suggested Time Monday, October 10, 1 p.m.	

Others pursuing the module may then add their names to the list, indicating alternate times if they cannot be available at the time suggested. When the required number of peers is signed up with a time agreed upon, the next individual ready would start a new sign-up sheet for that learning experience. Each small group would then schedule additional meetings, if needed, to complete the peer interaction needed by all members for that learning experience.

This approach places more responsibility for learning upon the individual. It also makes it possible for the resource person to coordinate activities and to be available when needed. If you use this approach, you may find it necessary to do some scheduling of your own to ensure that no one is neglected and that everyone has the needed opportunities for interaction with peers.

A variation of this approach would be for the resource person to identify all modules and learning experiences suggesting or requiring peer involvement, and then to schedule specific time blocks for each learning experience with a specified number of sign-up slots for presenters and observers allotted for each time block. Students would then fill in their own names in the appropriate slots as they became ready for the learning experience specified. You can help ensure adequate peer group participation if, when modules are being used within a course structure, you **require** that each teacher participate in a specific number of peer groups.

Scheduling Large and Small Groups

Another aspect of resource person management is the scheduling of teachers for group instruction. The PBTE program provides opportunities for a resource person to schedule large-group instruction and small-group discussion sessions.

The use of **large-group instruction** will be most successful if several teachers are working on a specified number of modules. A large-group meeting can provide opportunities to discuss problems being encountered in the modules or to provide additional or specified input into the modules. A number of questions and concerns of teachers can be clarified in these meetings.

It is suggested that in the early stages of a PBTE program, it is extremely helpful to schedule large-group meetings on a daily basis for 30–60 minute periods. After four or five of these daily sessions, regularly scheduled large-group meetings may be scheduled once a week until a program ends.

Caution should be exercised regarding the potential overuse of large-group meetings. There is a tendency on the part of some resource persons to revert to the role of presenter of information and for the large-group discussion to again become a class with a dual load being placed upon teachers—regular class requirements plus completion of modules. If this is allowed to occur, reactions to the class and to the PBTE program will certainly be less than positive.

The resource person may find the use of **small-group discussions** to be another effective means of clarifying points that are not clear to teachers. These sessions may be comprised of 2–5 or more teachers spending a few minutes discussing some issue or issues with a resource person. The resource person should recognize the importance of these informal sessions with teachers. The interpersonal communications they provide for can prove to be extremely valuable in the smooth operation of a PBTE program.

Record Keeping

The progress of teachers through the modules requires a resource person to establish and maintain a record-keeping system that has provision for indicating the number of learning activities completed within a module as well as the date and status of the final performance in each module.

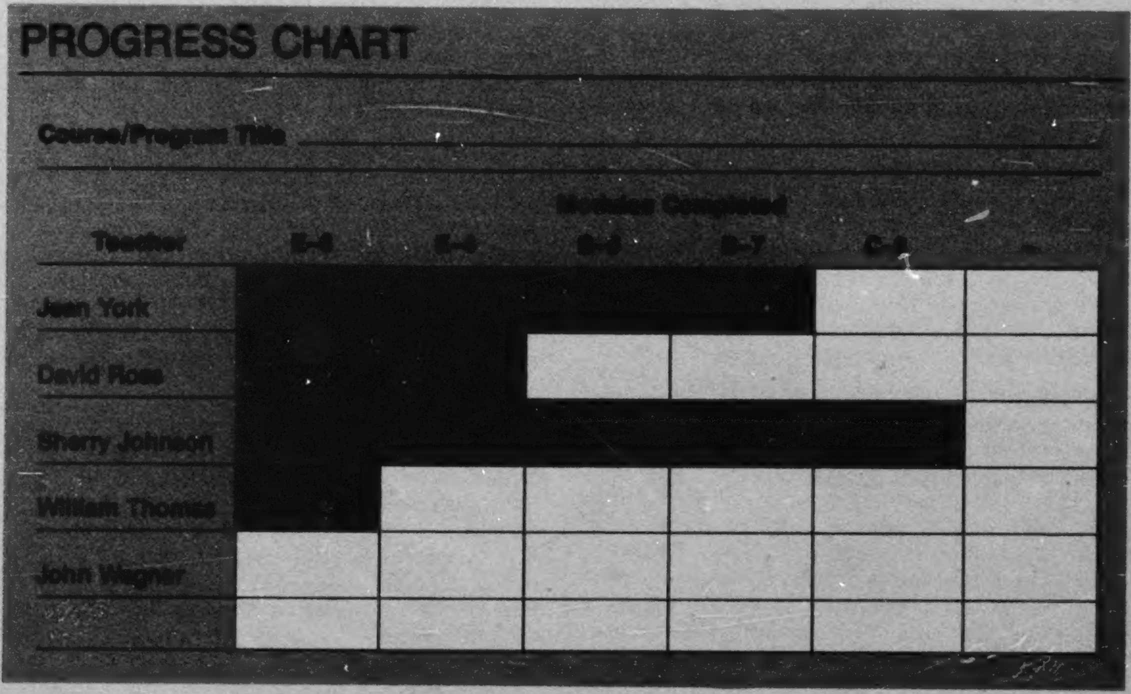
It is suggested that a resource person organize a notebook which records each teacher's progress on each module. Copies of the Personal Progress Record form in the student guide (Appendix F, Sample 2) can be used for your records of progress within modules as well as for the teacher's own records.

A record-keeping system that enables the resource person to record the learning experiences completed, the date completed, and the quality of the final performance—whether satisfactory (S) or unsatisfactory (U)—can be extremely valuable in monitoring the progress each teacher is making through the PBTE program.

The Vocational Teacher Competency Profile found on pp. 40–41 of this guide can be used very well both as a record of teacher progress and as a device to explain your program to teachers. Modules that are to be completed in your program can be identified on the chart, perhaps by highlighting with a marker. Then, upon completion of each module, the competency rating can be entered in the small box for that module.

Once the resource person and the teacher have a record of the teacher's progress, it may be important to report the individual's progress to the group. This reporting has several benefits. It tells the teacher how he/she is progressing individually, and it indicates to the resource person how the group as a whole is doing. Sample 12 is suggested as a means of indicating progress through the PBTE program to a class or group of teachers. The form, incidently, serves as a motivating force as well when made into a wall chart and displayed in the learning resource center.

SAMPLE 12



PROGRESS CHART

Course/Program Title ____________________

	Modules Completed					
Teacher	[illegible]	[illegible]	[illegible]	B-7	[illegible]	[illegible]
Jean York	■	■	■	■		
David Ross	■	■				
Sherry Johnson	■	■	■	■	■	
William Thomas	■					
John Wagner						

Summary

The list of Resource Person Do's and Don'ts shown in Figure 3 is provided as a concise summary of key points which are important in successfully fulfilling the role of resource person.

FIGURE 3

RESOURCE PERSON DO'S AND DON'TS

DO	DON'T
EXPLAIN WHAT PBTE IS	JUST GIVE OUT THE STUDENT GUIDE
USE THE MODULES AS AN AID	RELY TOTALLY ON THE MODULES
SUPPLEMENT AND ADAPT THE MODULES AS APPROPRIATE	FORGET YOUR TEACHERS' UNIQUE NEEDS AND INTERESTS
EXPECT TEACHERS TO NEED HELP	EXPECT THE MODULES TO BE SELF-INSTRUCTIONAL—THEY ARE NOT
SCHEDULE SMALL-GROUP DISCUSSIONS	TELL TEACHERS TO WORK ALONE
SCHEDULE TIME FOR INDIVIDUAL CONFERENCES	IGNORE INDIVIDUAL TEACHERS' NEEDS
HELP TEACHERS ASSESS THEIR NEEDS AND INTERESTS	LET TEACHERS SELECT MODULES BY THEMSELVES
CONDUCT LARGE-GROUP DISCUSSIONS	LECTURE ON THE SAME CONTENT AS COVERED BY THE MODULES
MONITOR STUDENT PROGRESS	LEAVE EVERYTHING TO THE TEACHERS
PROVIDE FREQUENT FEEDBACK TO STUDENTS	RELY COMPLETELY ON PAPER-AND-PENCIL TESTING
STRIVE FOR OBJECTIVE ASSESSMENT	EXPECT TO ACHIEVE COMPLETE OBJECTIVITY
ALLOW FOR DIFFERENT LEARNING STYLES	REQUIRE THE SAME ACTIVITIES OF EVERYONE
ALLOW TEACHERS TO PROGRESS AT THEIR OWN RATE	EXPECT ALL TO ACHIEVE COMPETENCE AT THE SAME RATE
FACILITATE PEER GROUP DISCUSSIONS	EXPECT TEACHERS TO GET TOGETHER BY THEMSELVES
FACILITATE FIELD EXPERIENCES	LEAVE ALL ARRANGEMENTS TO THE TEACHERS
TRAIN FIELD RESOURCE PEOPLE	NEGLECT THE PREPARATION OF FIELD SUPPORT PERSONNEL
MANAGE YOUR TIME WISELY	EXPECT MODULES TO REQUIRE LESS WORK ON YOUR PART
STUDY THE RESOURCE PERSON'S GUIDE	HESITATE TO READ IT AGAIN
SERVE AS ADVISOR, HELPER, AND ASSESSOR	SHIRK YOUR RESPONSIBILITIES AS RESOURCE PERSON

VOCATIONAL TEACHER COMPETENCY PROFILE

Name ______________________ **Address** ______________________
Institution ______________________ **Date Started** ______________________
Resource Person(s) ______________________

These competencies represent the titles of 100 PBTE modules which have been developed, field tested, and revised by The Center for Vocational Education. The modules address all of the 384 performance elements identified in research conducted by The Center as important to secondary and post-secondary vocational teachers. These modules and four supporting documents—a student guide, a resource person guide, an implementation guide, and the state-of-the-art report are being published by the American Association for Vocational Instructional Materials (AAVIM), Engineering Center, University of Georgia, Athens, Georgia 30602.

These materials were developed and tested pursuant to contracts with the National Institute of Education and the U. S. Office of Education.

PBTE

	Category				
A	Program Planning, Development, and Evaluation (11 modules)	A-1 Prepare for a Community Survey	A-2 Conduct a Community Survey	A-3 Report the Findings of a Community Survey	A-4 Organize an Occupational Advisory Committee
B	Instructional Planning (6 modules)	B-1 Determine Needs and Interests of Students	B-2 Develop Student Performance Objectives	B-3 Develop a Unit of Instruction	B-4 Develop a Lesson Plan
C	Instructional Execution (29 modules)	C-1 Direct Field Trips	C-2 Conduct Group Discussions, Panel Discussions, and Symposiums	C-3 Employ Brainstorming, Buzz Group, and Question Box Techniques	C-4 Direct Students in Instructing Other Students
	Instructional Execution (Cont'd)	C-12 Employ Oral Questioning Techniques	C-13 Employ Reinforcement Techniques	C-14 Provide Instruction for Slower and More Capable Learners	C-15 Present an Illustrated Talk
	Instructional Execution (Cont'd)	C-23 Present Information with Overhead and Opaque Materials	C-24 Present Information with Filmstrips and Slides	C-25 Present Information with Films	C-26 Present Information with Audio Recordings
D	Instructional Evaluation (6 modules)	D-1 Establish Student Performance Criteria	D-2 Assess Student Performance: Knowledge	D-3 Assess Student Performance: Attitudes	D-4 Assess Student Performance: Skills
E	Instructional Management (9 modules)	E-1 Project Instructional Resource Needs	E-2 Manage Your Budgeting and Reporting Responsibilities	E-3 Arrange for Improvement of Your Vocational Facilities	E-4 Maintain a Filing System
F	Guidance (5 modules)	F-1 Gather Student Data Using Formal Data-Collection Techniques	F-2 Gather Student Data through Personal Contacts	F-3 Use Conferences to Help Meet Student Needs	F-4 Provide Information on Educational and Career Opportunities
G	School-Community Relations (10 modules)	G-1 Develop a School-Community Relations Plan for Your Vocational Program	G-2 Give Presentations to Promote Your Vocational Program	G-3 Develop Brochures to Promote Your Vocational Program	G-4 Prepare Displays to Promote Your Vocational Program
H	Student Vocational Organization (6 modules)	H-1 Develop a Personal Philosophy Concerning Student Vocational Organizations	H-2 Establish a Student Vocational Organization	H-3 Prepare Student Vocational Organization Members for Leadership Roles	H-4 Assist Students in Developing and Financing a Yearly Program of Activities
I	Professional Role and Development (8 modules)	I-1 Keep Up-to-Date Professionally	I-2 Serve Your Teaching Profession	I-3 Develop an Active Personal Philosophy of Education	I-4 Serve the School and Community
J	Coordination of Cooperative Education (10 Modules)	J-1 Establish Guidelines for Your Cooperative Vocational Program	J-2 Manage the Attendance, Transfers, and Terminations of Co-Op Students	J-3 Enroll Students in Your Co-Op Program	J-4 Secure Training Stations for Your Co-Op Program

SUPPORTING MATERIALS

Guide to the Implementation of Performance-Based Teacher Education by Glen E. Fardig, Robert E. Norton, and James B. Hamilton.

Resource Person Guide to Using Performance-Based Teacher Education Materials by James B. Hamilton and Karen M. Quinn.

Student Guide to Using Performance-Based Teacher Education Materials by Robert E. Norton and May Huang.

Performance-Based Teacher Education: The State of the Art, General Education and Vocational Education by Robert E. Norton, Lois Harrington, and Janet Gill.

Vocational Teacher Competency Profile-
Pad of 50 Individualized Record Sheets

COMPETENCY RATING SCALE

1. Poor: The teacher is unable to perform this skill or has only very limited ability to perform it.

2. Fair: The teacher is unable to perform this skill in an acceptable manner but has some ability to perform it.

3. Good: The teacher is able to perform this skill in an effective manner.

4. Excellent: The teacher is able to perform this skill in a very effective manner.

Competencies

A-5 Maintain an Occupational Advisory Committee ☐	A-6 Develop Program Goals and Objectives ☐	A-7 Conduct an Occupational Analysis ☐	A-8 Develop a Course of Study ☐	A-9 Develop Long-Range Program Plans ☐	A-10 Conduct a Student Follow-Up Study ☐	A-11 Evaluate Your Vocational Program ☐
B-5 Select Student Instructional Materials ☐	B-6 Prepare Teacher-Made Instructional Materials ☐					
C-5 Employ Simulation Techniques ☐	C-6 Guide Student Study ☐	C-7 Direct Student Laboratory Experience ☐	C-8 Direct Students in Applying Problem-Solving Techniques ☐	C-9 Employ the Project Method ☐	C-10 Introduce a Lesson ☐	C-11 Summarize a Lesson ☐
C-16 Demonstrate a Manipulative Skill ☐	C-17 Demonstrate a Concept or Principle ☐	C-18 Individualize Instruction ☐	C-19 Employ the Team Teaching Approach ☐	C-20 Use Subject Matter Experts to Present Information ☐	C-21 Prepare Bulletin Boards and Exhibits ☐	C-22 Present Information with Models, Real Objects, and Flannel Boards ☐
C-27 Present Information with Televised and Videotaped Materials ☐	C-28 Employ Programmed Instruction ☐	C-29 Present Information with the Chalkboard and Flip Chart ☐				
D-5 Determine Student Grades ☐	D-6 Evaluate Your Instructional Effectiveness ☐					
E-5 Provide for Student Safety ☐	E-6 Provide for the First Aid Needs of Students ☐	E-7 Assist Students in Developing Self-Discipline ☐	E-8 Organize the Vocational Laboratory ☐	E-9 Manage the Vocational Laboratory ☐		
F-5 Assist Students in Applying for Employment or Further Education ☐						
G-5 Prepare News Releases and Articles Concerning Your Vocational Program ☐	G-6 Arrange for Television and Radio Presentations Concerning Your Vocational Program ☐	G-7 Conduct an Open House ☐	G-8 Work with Members of the Community ☐	G-9 Work with State and Local Educators ☐	G-10 Obtain Feedback about Your Vocational Program ☐	
H-5 Supervise Activities of the Student Vocational Organization ☐	H-6 Guide Participation in Student Vocational Organization Contests ☐					
I-5 Obtain a Suitable Teaching Position ☐	I-6 Provide Laboratory Experiences for Prospective Teachers ☐	I-7 Plan the Student Teaching Experience ☐	I-8 Supervise Student Teachers ☐			
J-5 Place Co-Op Students on the Job ☐	J-6 Develop the Training Ability of On-the-Job Instructors ☐	J-7 Coordinate On-the-Job Instruction ☐	J-8 Evaluate Co-Op Students' On-the-Job Performance ☐	J-9 Prepare for Students' Related Instruction ☐	J-10 Supervise an Employer-Employee Appreciation Event ☐	

Appendix A

DEVELOPMENT OF THE CENTER'S PERFORMANCE-BASED TEACHER EDUCATION MATERIALS

The research and development of The Center's performance-based vocational teacher education materials involved three major phases: (1) identification of important teaching competencies (research base), (2) development of curricular materials, and (3) testing and revision of materials. These three developmental phases, which are being followed by a dissemination phase, are shown in diagram form in Figure 4.

The Research Base

Center work began with two research projects to determine the teacher competencies important to vocational teachers. Approximately 1,100 vocational teachers, supervisors, and teacher educators were involved in the identification and verification of 384 performance elements, or competencies, considered important to vocational teaching.

In the first phase of the research study, the competencies important to teachers of conventional programs were identified through occupational analysis using introspection and interview techniques, and then verified through a critical incident study. The competencies identified were those needed by secondary and/or post-secondary teachers in agricultural, business and office, distributive, health occupations, home economics, technical, and trade and industrial education. This study resulted in the identification of 256 common competencies (competencies needed by teachers in two or more of the seven service areas studied).

The second phase of the research study sought to determine the teacher competencies important to teacher-coordinators in cooperative programs, namely off-farm agricultural, wage-earning home economics, office occupations, special needs, and trade and industrial education. Using introspection and interview techniques of occupational analysis, a total of 385 teacher competencies were identified, including those identified in Phase I of the study. These competencies were clustered into ten categories representing ten areas of vocational teacher responsibility. The findings of phases I and II were then merged into one comprehensive list of 390 competencies and later reduced to a total of 384 through elimination of duplication. These vocational teacher competencies are organized into the following categories.

A–Program Planning, Development, and Evaluation
B–Instructional Planning
C–Instructional Execution
D–Instructional Evaluation
E–Instructional Management
F–Guidance
G–School-Community Relations
H–Student Vocational Organization
I –Professional Role and Development
J–Coordination of Cooperative Education

FIGURE 4

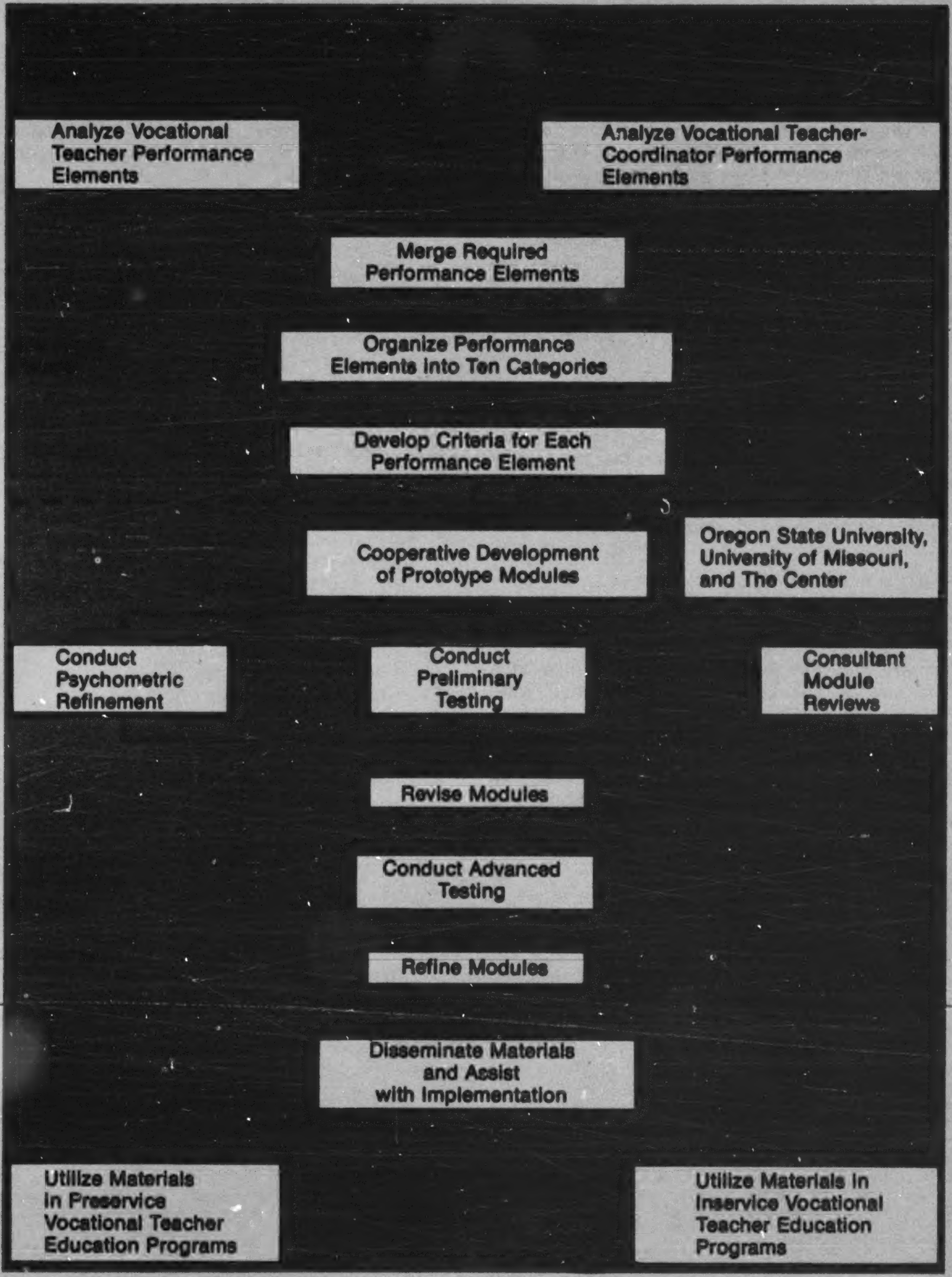

Analyze Vocational Teacher Performance Elements
Analyze Vocational Teacher-Coordinator Performance Elements
Merge Required Performance Elements
Organize Performance Elements into Ten Categories
Develop Criteria for Each Performance Element
Cooperative Development of Prototype Modules
Oregon State University, University of Missouri, and The Center
Conduct Psychometric Refinement
Conduct Preliminary Testing
Consultant Module Reviews
Revise Modules
Conduct Advanced Testing
Refine Modules
Disseminate Materials and Assist with Implementation
Utilize Materials in Preservice Vocational Teacher Education Programs
Utilize Materials in Inservice Vocational Teacher Education Programs

Figure 5 presents a graphic summary of research phases I and II and their merger, resulting in the research base of 384 performance elements. A complete listing of the 384 performance elements by category is provided in Appendix B for your use. Finally, a set of performance-oriented general objectives specifying the task and the general criteria for evaluating a teacher's performance of the stated activity was developed.[2]

Development of Curricular Materials

Following the identification of the 384 vocational teacher competencies, work was initiated to develop the necessary curricular materials for implementing PBTE programs at the preservice and inservice levels for all vocational service areas. The curricular materials are in the form of individualized learning packages, or modules, each of which has as its base one or more of the 384 competencies. By basing the modules on the verified competencies, there is solid assurance that the objectives of the modules actually represent competencies needed by vocational teachers.

To further ensure that the materials developed reflect the actual needs of vocational teachers and that the materials would be acceptable by all vocational areas, the module development process was structured to ensure maximum involvement of persons actively engaged in vocational teacher preparation. Each of 123 modules was originally developed in cooperation with vocational teacher education faculties at Oregon State University, Corvallis, and University of Missouri, Columbia. The Center for Vocational Education staff worked on-site with writing teams representing the different service areas at each of these universities.

A quite rigid system of development, review, and revision was followed by the writing teams at each of these sites during the initial module development. Following development of each module to the satisfaction of the faculty at the site, the module was then forwarded to the other site for review and critique by their faculty. Each module also underwent review and critique by Center staff. A synthesis of all faculty and staff reviews was developed, and each module was revised by Center staff. Based upon reviewer feedback, several modules were combined in the revision process. Thus, 118 professional vocational teacher education modules were revised in preparation for initial testing.

Preliminary Testing and Revision of the Materials

Initial testing of the performance-based curricular materials was carried out at Oregon State University, University of Missouri-Columbia, and Temple University. Each of the 118 modules was used by a minimum of ten preservice and/or inservice vocational teachers at one or more of the test sites. Reaction forms were completed by each teacher for each module used and by each faculty member or resource person for each module they administered. In addition, in-depth taped interviews were conducted to clarify and gain additional feedback from students and resource persons for a sampling of the modules tested.

Concurrently, the California Testing Bureau of McGraw-Hill conducted psychometric refinement of the objectives and assessments of each of the 118 modules. Several individual modules and entire categories of modules were reviewed and critiqued by independent consultants and subject matter experts during this phase of the study.

Based on the inputs from students, resource persons, psychometric refinements, and consultant reviews, each of the modules underwent major revision of content and format. Major changes that were indicated as necessary (which were subsequently made to all modules) during this time period were—

- improving directions within the module
- incorporating front-to-back sequencing of module activities and materials
- making each module essentially self-contained by inclusion of all essential information within information sheets
- providing alternate activities each time a learning activity required the use of peers
- providing more flexibility and individualization in the form of optional activities
- adding symbols within the module to help guide the user
- recombining some elements and modules to eliminate minute competencies and improve articulation among modules

Incorporation of the suggestions for recombination of elements and modules resulted in a reduction from a total of 118 modules to 100 modules.

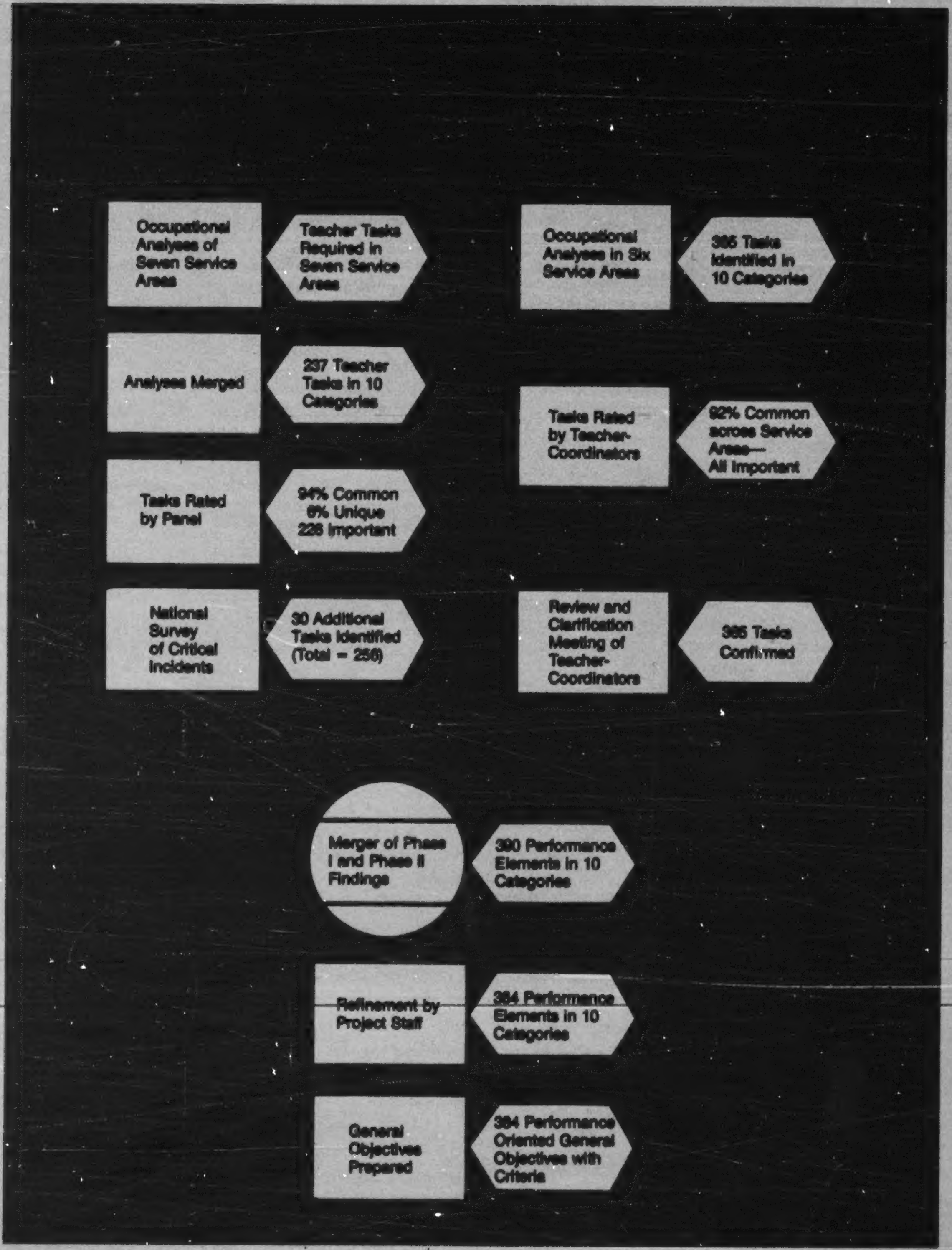
Advanced Testing and Refinement

Advanced testing of the materials was conducted at 18 sites representing wide geographic areas and settings as well as several differing PBTE program structures. Feedback from each individual using the modules and from each resource person was gathered to further improve the mate-

---

[2] Calvin J. Cotrell et al., *Model Curricula for Vocational and Technical Teacher Education: Report No. V, General Objectives—Set II* (Columbus, OH: The Center for Vocational Education, The Ohio State University, 1972).

FIGURE 5


Occupational Analyses of Seven Service Areas
Teacher Tasks Required in Seven Service Areas
Analyses Merged
237 Teacher Tasks in 10 Categories
Tasks Rated by Panel
94% Common 6% Unique 228 Important
National Survey of Critical Incidents
30 Additional Tasks Identified (Total = 258)
Occupational Analyses in Six Service Areas
385 Tasks Identified in 10 Categories
Tasks Rated by Teacher-Coordinators
92% Common across Service Areas— All Important
Review and Clarification Meeting of Teacher-Coordinators
385 Tasks Confirmed
Merger of Phase I and Phase II Findings
390 Performance Elements in 10 Categories
Refinement by Project Staff
384 Performance Elements in 10 Categories
General Objectives Prepared
384 Performance Oriented General Objectives with Criteria

rials. Over 2,000 preservice and inservice teachers and over 250 teacher educators and other resource persons participated in the testing and provided feedback to The Center. This user feedback provided information about the characteristics of the user and how well the materials served his/her needs. Advanced test data showed the modules generally to be highly effective in the development of the specified competencies in both preservice and inservice training programs.

Following advanced testing of the materials, each module was refined in preparation for publication. Based upon the advanced testing feedback, few substantive changes were necessary. Major changes made between the advanced test version of the modules and the published version were that—

- several additional illustrations were included in each module
- explanatory material common to all modules was moved to the inside back cover of the module
- two basic colors were used for each module category
- most printed matter was typeset in two single-spaced columns
- modules were saddle-stitched and three-hole punched; pages were perforated

Following completion of the advanced testing and refinement of the materials, The Center's PBTE materials were released for publication and dissemination. Joint dissemination activities are being conducted by The Center, the publisher, and federal, state, and regional sponsors to provide orientation and training for effective implementation and use of the PBTE curricular materials.

Appendix B

MASTER LIST OF CATEGORIES AND PERFORMANCE ELEMENTS[3]

I. Program Planning, Development, and Evaluation

1. Organize a steering committee to assist in the preplanning activities of a community survey.
2. Identify the geographical area in which a community survey will be conducted.
3. Obtain administrative approval for conducting a community survey.
4. Solicit assistance of the vocational education personnel from the state department and/or university in conducting a community survey.
5. Adapt existing community survey materials to local needs.
6. Consult the chamber of commerce to identify area employers to be contacted in a community survey.
7. Consult the local office of the U.S. Employment Service to obtain information on manpower trends and needs.
8. Persuade labor representatives to participate in a community survey.
9. Involve the steering committee in conducting a community survey.
10. Recruit teachers and guidance personnel to participate in conducting a community survey.
11. Establish communication with employer representatives who will be involved in a community survey.
12. Devise a plan of activities for the survey staff to follow in conducting a community survey.
13. Publicize the purposes and objectives of a community survey.
14. Orient the survey staff to their duties and responsibilities in collecting occupational data.
15. Direct students in the collection of data for a community survey.
16. Collect occupational data from employers to identify vocational education needs.
17. Collect student occupational interest data to identify vocational education needs.
18. Recommend a vocational education program based on the findings of a community survey.
19. Disseminate the findings of a community survey.
20. Identify the role and function of the advisory committee.
21. Establish the criteria for selection of the advisory committee members.
22. Obtain school board authorization for organizing the advisory committee.
23. Obtain administrative approval of the selected advisory committee members.
24. Publicize to the school and community the establishment of the advisory committee, its members, and its function.
25. Orient the advisory committee members to their role and function.
26. Plan the annual agenda to be considered by the advisory committee.
27. Communicate the date, place, and agenda for the advisory committee meetings to all persons concerned.
28. Invite resource persons who can provide consultation service to attend the advisory committee meetings.
29. Serve as the liaison for the advisory committee and the school administration.
30. Assist in the identification of the school's vocational education purposes and goals.
31. Determine the occupations for which training is to be offered in the vocational education program.
32. Consult the advisory committee in planning an analysis of an occupation.
33. Analyze occupations with the assistance of employers and labor representatives.
34. Identify the competencies needed for entry into an occupation.
35. Describe the occupational standards of performance for each task in an occupation.
36. Assist in writing general objectives for the vocational education program offerings.
37. Develop vocational education offerings by clustering and sequencing related tasks.
38. Identify the knowledge and attitudes required for the performance of each task included in a vocational education offering.
39. Write student performance objectives for the vocational education offering.
40. Consult the advisory committee in developing a long-range program plan for vocational education.
41. Analyze long-range needs for the offerings of the vocational education program.
42. Specify the long-range facility, equipment, and supply needs for the vocational education program.
43. Assist in the preparation of a long-range budget for the vocational education program.
44. Identify the long-range needs for employing faculty for the vocational education program.
45. Assist in preparing the long-range program plan for vocational education.
46. Analyze continual follow-up information on the placement, employment, and training status of each graduate of the vocational education program.
47. Obtain follow-up data from employers of graduates of the vocational education program.
48. Determine the reasons students leave the vocational education program.
49. Review supervisory evaluation reports for assessing the vocational education program.
50. Assess the relevancy of the vocational education offerings.
51. Disseminate a summary of the vocational education program evaluation to administrators, advisory committee members, and members of the board of education.

II. Planning of Instruction

52. Review general objectives for the vocational education offerings.
53. Review student performance objectives developed for the vocational education offerings.
54. Sequence student performance objectives for an offering in the vocational education program.
55. Determine student needs and interests.
56. Involve the students in planning a unit.

---

[3] Taken from Calvin J. Cotrell *et al.*, *Model Curricula for Vocational and Technical Teacher Education: Report No. V, General Objectives—Set II* (Columbus, OH: The Center for Vocational Education, The Ohio State University, 1972).

57. Select student performance objectives for a unit.
58. Write content outline for a unit.
59. Correlate unit content with on-the-job and/or laboratory experiences.
60. Determine group and individual learning experiences for a unit based on individual differences of students.
61. Select methods of evaluating student performance throughout a unit.
62. Identify the student performance objectives for a lesson.
63. Select teaching techniques for a lesson.
64. Plan the introduction of a lesson.
65. Plan the content of a lesson.
66. Plan the summary of a lesson.
67. Plan student learning experiences for a lesson.
68. Select methods of evaluating students' attainment of specific student performance objectives.
69. Write a lesson plan.
70. Obtain textbook, reference, and other instructional materials.
71. Select tools and/or equipment for a lesson.
72. Assemble consumable supplies for instructional purposes.
73. Develop original instructional materials such as individualized related assignment sheets, transparencies, and charts.
74. Involve students in the preparation of instructional materials.
75. Obtain programmed instructional materials.
76. Prepare instructional materials with a spirit duplicator.
77. Prepare instructional materials with a stencil duplicator.
78. Prepare instructional materials (hard copy and transparency) with a photocopier.

III. Execution of Instruction

79. Conduct field trips.
80. Direct students in gathering information from sources in the community.
81. Conduct symposiums.
82. Conduct brainstorming sessions.
83. Direct student presentations.
84. Direct students in instructing other students.
85. Direct simulation techniques.
86. Conduct group supervised study.
87. Direct student laboratory experience.
88. Direct students in applying problem-solving techniques.
89. Present information through case study problems.
90. Present information by the project method.
91. Direct student study of textbooks, bulletins, and pamphlets.
92. Direct student study of information and assignment sheets.
93. Direct students in preparing laboratory work or job plans.
94. Guide student progress through the use of operation and/or job sheets.
95. Lead group discussions.
96. Conduct panel discussions.
97. Conduct buzz groups.
98. Employ the question box technique.
99. Employ role-playing techniques.
100. Introduce a lesson.
101. Obtain summary for a lesson.
102. Employ oral questioning techniques.
103. Acknowledge student verbal and nonverbal cues.
104. Enrich instruction to challenge the abilities of the more capable student.
105. Reinforce learning.
106. Provide remedial work for slow learners.
107. Employ reward techniques.
108. Establish frames of reference to enable the students to understand a situation from several points of view.
109. Apply nonverbal techniques.
110. Demonstrate a manipulative skill.
111. Present a concept or principle through a demonstration.
112. Give a lecture.
113. Give an illustrated talk.
114. Present information with analogies.
115. Present information by use of individualized instruction.
116. Present information through team teaching.
117. Give an assignment.
118. Present information with the assistance of a resource person.
119. Present information with bulletin boards.
120. Present information with exhibits.
121. Illustrate with models and real objects.
122. Present information with an overhead projector.
123. Present information with an opaque projector.
124. Present information with filmstrips.
125. Present information with slides.
126. Present information with sound motion pictures.
127. Present information with single concept films.
128. Present information with an audio recorder.
129. Present information with a video recorder or closed circuit television.
130. Present information with a tele-lecture.
131. Present information with a record player.
132. Present information with educational television.
133. Direct teaching-machine programmed instruction.
134. Present information by computer-assisted instruction.
135. Direct written programmed instruction.
136. Present information with the aid of a flannel board.
137. Present information with the aid of a flip chart.
138. Present information with the aid of a chalkboard.

IV. Evaluation of Instruction

139. Establish criteria for student performance.
140. Formulate a system of grading consistent with school policy.
141. Appraise students' products according to occupational performance standards.
142. Appraise students' performance in relation to student performance objectives.
143. Evaluate individualized assignments completed under directed study.
144. Devise self-evaluation techniques for use by students.
145. Arrange for students to evaluate their own progress.
146. Engage in cooperative evaluation of achievement with students.
147. Determine students' grades based on related instruction and laboratory or on-the-job experience.
148. Interpret students' evaluation of instruction.
149. Formulate essay test items.
150. Formulate true-false test items.
151. Formulate completion test items.
152. Formulate matching test items.
153. Formulate multiple-choice test items.
154. Devise laboratory performance tests.
155. Devise laboratory performance rating sheets.
156. Formulate test items for an oral test.
157. Administer teacher-made tests.
158. Devise case study problems.
159. Analyze tests for validity.
160. Analyze tests for reliability.

161. Review student progress and/or achievement records to assess effectiveness of instruction.
162. Involve students in formulating the procedures for their participation in the evaluation of instruction.
163. Obtain information from fellow teachers and supervisory personnel regarding the quality of one's instruction.
164. Seek opportunities for self-evaluation of instruction.

V. Management

165. Compile a list of supplies needed for the academic year.
166. Identify new tools and/or equipment needed for the academic year.
167. Recommend reference books and periodicals related to vocational education that should be added to the library.
168. Prepare a capital outlay budget proposal for new equipment.
169. Plan an operating budget proposal for consumable supplies, services, and instructional materials.
170. Prepare a budget for estimating travel expenses incurred in vocational activities.
171. Arrange for additional vocational facilities to accommodate expended enrollments and technological advancements.
172. Prepare purchase requests for approved vocational equipment and supplies.
173. Design a procedure for acquiring needed consumable supplies and materials.
174. Accept gifts or donations of supplies and equipment for the vocational education program in accordance with school policy.
175. Devise a system for determining and collecting student fees for consumable supplies.
176. Structure a filing system for records and report forms.
177. Supply the data for vocational reports required by the state department of education.
178. Devise a filing system for instructional materials.
179. Devise a system for maintaining occupational opportunity information for use by vocational students.
180. Record vocational student attendance according to school policy.
181. Record vocational students' grades according to school policy.
182. Assemble individual student files documenting personal characteristics, attitudes, and grades.
183. Provide approved safety apparel and devices for vocational students assigned to hazardous equipment.
184. Establish a procedure for attending to the first aid needs of vocational students.
185. Maintain a record of safety instruction presented in compliance with safety laws and regulations.
186. Uphold school standards of expected student behavior.
187. Formulate with students acceptable standards of behavior in vocational classrooms and laboratories.
188. Uphold acceptable standards of student behavior in vocational classrooms and laboratories.
189. Carry out approved disciplinary action when warranted.
190. Encourage students to exercise self-discipline.
191. Control outbursts of fighting and aggressive behavior.
192. Maintain an inventory of vocational tools, supplies, and equipment.
193. Establish a system for repairing and servicing tools and equipment in the laboratory.
194. Arrange for the storage and security of supplies and equipment.
195. Implement student check-out procedures for tools, supplies, and equipment used in the laboratory.
196. Direct students in a system for cleaning and maintaining the laboratory.
197. Schedule laboratory equipment for maximum utilization by students.
198. Arrange layout of the vocational laboratory to simulate the occupational environment.
199. Arrange laboratory work areas and storage space to facilitate student work performance.
200. Control heat, light, and ventilation in vocational laboratories and classrooms.
201. Establish a policy for use of the physical facilities and equipment by other school personnel and outside groups.

VI. Guidance

202. Determine students' background and environment.
203. Administer subject matter diagnostic tests.
204. Analyze students' cumulative records.
205. Maintain anecdotal records.
206. Determine relationships among students through the sociogram or other sociometric techniques.
207. Review students' autobiographies for information to aid in understanding the students.
208. Assemble information for case study reports.
209. Communicate with prospective and continuing students during the summer.
210. Maintain an open door policy for student consultation.
211. Encourage students to discuss career aspirations.
212. Demonstrate a regard for, and an interest in, students as individuals.
213. Develop constructive working relationships among students.
214. Demonstrate personal concern for the student and his family.
215. Conduct home visits.
216. Recognize potential problems of students.
217. Conduct a conference with a student.
218. Conduct group conferences.
219. Confer with the student and his/her parents regarding his/her educational development.
220. Interpret occupational tests and inventories to students.
221. Assist students in developing good study habits.
222. Establish communication patterns for exchanging information and for cooperating with the guidance staff.
223. Supply guidance staff with performance data about students.
224. Refer students to guidance staff and other specialists.
225. Assist students with their problems by working cooperatively with outside agencies such as health and welfare services.
226. Work with other teachers to help students with individual concerns.
227. Refer students to qualified resource persons for occupational and educational information.
228. Arrange with professional staff for administration and interpretation of personality, aptitude, and intelligence tests for specific students.
229. Arrange for the local office of the U.S. Employment Service to administer and interpret the General Aptitude Test Battery.
230. Present information to students on occupational opportunities.
231. Present information to students on advanced training and educational opportunities available to them.
232. Assist students in determining ways to best describe their salable skills.
233. Write letters of recommendation for students.
234. Assist graduating students in preparing for interviews with potential employers.
235. Assist students in securing and completing applications for jobs, scholarships, educational loans, or college admission.

VII. School-Community Relations

236. Assist in the development of policies regarding school-community relations.
237. Plan the school-community relations activities for the vocational education program.
238. Procure clearance from the school administration to conduct school-community relations activities related to the vocational education program.
239. Express a philosophy consistent with that of the vocational faculty.
240. Speak to school and community groups about the vocational education program.
241. Provide brochures to inform the school and community about the vocational education program.
242. Provide displays in the school and community about the vocational education program.
243. Prepare news releases and manuscripts on activities of the vocational education program for newspapers and other periodicals.
244. Present activities of the vocational education program on television.
245. Present activities of the vocational education program on radio.
246. Direct student presentations describing activities of the vocational education program.
247. Conduct an open house to familiarize members of the school and community with activities of the vocational education program.
248. Sponsor student-parent activities for the vocational education program.
249. Assist with special community social events.
250. Assist with community business and industry sponsored activities.
251. Serve in professional nonvocational organizations to improve the image of the vocational education program.
252. Serve in a community civic, service, or social organization to improve the image of the vocational education program.
253. Provide consultant services to local business and industry.
254. Maintain liaison with union officials and employers.
255. Maintain liaison with employment agencies.
256. Maintain liaison with community professional, service, fraternal, social, and religious organizations.
257. Maintain good relations with other schools.
258. Maintain liaison with state department personnel.
259. Obtain informal feedback on the vocational education program through contacts with individuals in the school and community.
260. Conduct opinion surveys in the school and community concerning the vocational education program.
261. Analyze enrollment trends to determine student and parent acceptance of the vocational education program.
262. Obtain information from parents relative to their expectations of the vocational education program.
263. Consult the advisory committee to obtain information concerning their expectations of the vocational education program.
264. Acquire information from members of the community power structure (e.g., political, social, and economic pressure groups) regarding their expectations of the vocational education program.
265. Study community voting results on financial issues affecting the vocational education program to determine community support.
266. Study in-school election results (student council, class officers) to determine the image of the vocational students in the school.
267. Maintain working relationships with the school administration and faculty.
268. Assist in planning the goals of the total school program.
269. Maintain working relationships with the school supporting staff through cooperation and mutual effort.

VIII. Student Vocational Organization

270. Obtain approval from the school administration for establishing the student vocational organization.
271. Contact state department personnel regarding the steps to be followed in organizing a student vocational organization.
272. Acquaint prospective members and their parents with the purposes, activities, and values of the student vocational organization.
273. Organize a student committee to assess student interest in joining a student vocational organization.
274. Assist in the development of a constitution and bylaws for the student vocational organization.
275. Conduct an organizational meeting for a student vocational organization.
276. Direct initiation activities of the student vocational organization.
277. Orient students to the student vocational organization.
278. Assist in the election and installation of officers of the student vocational organization.
279. Conduct a leadership training session for the officers of the student vocational organization.
280. Obtain the assistance of state department personnel in maintenance of the student vocational organization.
281. Assist students in developing a yearly program of work for the student vocational organization.
282. Assist students in advancing within the available degrees in the student vocational organization.
283. Supervise social and educational activities for the student vocational organization.
284. Involve elected chapter parents in the activities of the student vocational organization.
285. Assist students with publicizing the student vocational organization activities.
286. Assist students with the financial management of the student vocational organization.
287. Assist in planning and organizing fund-raising activities for the student vocational organization.
288. Maintain a file of publications available for the student vocational organization.
289. Supervise the development of an annual handbook for the student vocational organization.
290. Supervise the development of a chapter scrapbook for the student vocational organization.
291. Evaluate the student vocational organization.
292. Affiliate the student vocational organization with the state and national vocational organizations.
293. Assist in the preparation of state and national reports for the student vocational organization.
294. Provide advice for student entries in state and national student vocational organization contests.
295. Send student representatives to district, state, regional, and national student vocational organization activities.
296. Assist in the development of rules and procedures for conducting district, state, regional, and national student vocational organization contests.
297. Serve as an advisor or judge for district, state, regional, or national student vocational organization contests.
298. Participate in district, state, regional, and national activities of the student vocational organization.

IX. Professional Role and Development

299. Identify current trends of the teaching profession.
300. Promote the attainment of the goals of the teaching profession.
301. Express a personal professional philosophy consistent with the goals of the teaching profession.
302. Express a personal professional philosophy consistent with the goals of vocational education.

303. Maintain the ethical standards expected of a professional educator.
304. Exchange observational visits, innovations, and ideas with others in the profession.
305. Support professional organizations through membership and attendance at meetings.
306. Serve professional organizations as an officer and/or chairperson, or member of a committee.
307. Represent the teaching profession as a committee member, delegate, or program participant at meetings and activities of other related professions.
308. Participate in experimental and other data-collecting research activities.
309. Write an article or book for publication which contributes to the literature of the profession.
310. Assist in orienting teachers who are new to the school system.
311. Work with a team from the school and/or community on pertinent school activities.
312. Serve community needs by contributing professional expertise to community activities.
313. Consult supervisory and administrative evaluations to determine attitudes of others toward one's personal and professional abilities and limitations.
314. Use a self-analysis form to evaluate personal and professional abilities and limitations.
315. Select the teaching position which is in keeping with personal and professional abilities and limitations.
316. Maintain professional certification through enrolling in graduate, extension, and inservice education programs.
317. Expand educational background and leadership potential by achieving advanced degrees.
318. Keep up to date through reading professional literature.
319. Acquire new occupational skills and information needed to keep pace with technological advancement in vocational education.
320. Update professional personnel file regularly.
321. Participate in noninstructional school activities (cafeteria supervision, homeroom, bus duty, chaperoning, etc.).
322. Assist with nonvocational student organization activities.
323. Provide opportunities for potential teachers to observe and participate in the public school program.
324. Interpret the policies and regulations of the local school district to the student teacher.
325. Plan activities for the student teacher which draw upon and enrich college course work.
326. Assign responsibilities commensurate with the student teacher's background of knowledge and experience.
327. Demonstrate instructional techniques for student teachers.
328. Consult regularly with the student teacher regarding planning, implementing, and evaluating teaching.
329. Confer regularly with the student teacher.
330. Confer with the college supervisor and the student teacher regarding plans for, and evaluation of, the total student teaching experience.

X. Coordination of Cooperative Education

331. Establish criteria for selection of student-learners.
332. Provide prospective student-learners with resource materials on occupational opportunities to aid them in selecting a vocation.
333. Administer occupational tests relative to student-learner selection and placement.
334. Gather student-learner selection data.
335. Interview students and parents to obtain student-learner interest and aptitude information.
336. Identify a prospective student-learner on the basis of selection criteria and data.
337. Match a student-learner's unique characteristics with an appropriate training station.
338. Negotiate on-the-job training hours and wages for student-learners.
339. Establish criteria for evaluating the training station potential of a business or industry.
340. Identify prospective cooperating employers to provide on-the-job training stations.
341. Establish criteria to evaluate qualifications of prospective on-the-job instructors.
342. Assess training capability of the on-the-job instructor of the prospective training station.
343. Assess educational adequacy of the prospective training station's facilities and equipment.
344. Assess safety provisions of the facilities and equipment of the prospective training station.
345. Convince an employer to provide a training station for cooperative vocational education.
346. Arrange with a union to make contract provisions for student-learners.
347. Develop a training agreement between student-learner, parent, school, and cooperating employer.
348. Arrange school and work schedules with student-learners and school and employing personnel.
349. Develop a systematic training plan with the cooperating employer and/or the on-the-job instructor.
350. Aid student-learners in procuring work permits.
351. Assist the cooperating employer in obtaining information concerning federal and state wage and hour classifications.
352. Assist the cooperating employer in acquiring a federal permit to pay a training wage.
353. Assist the cooperating employer in verifying the legality of employing a student-learner in a hazardous occupation.
354. Establish the cooperating employer's qualifications for reimbursement for training a student-learner.
355. Obtain reimbursement for the cooperating employer providing on-the-job training.
356. Obtain reimbursement for the student-learner for allowable training costs such as clothing and tools.
357. Prepare the student-learner for an interview with the cooperating employer and training station personnel.
358. Assist the student-learner in on-the-job training orientation.
359. Assist the cooperating employer's personnel in accepting the training status and role of the student-learner.
360. Maintain good working relationships with training station personnel.
361. Develop a procedure to ensure student's safety and protection in the training station.
362. Develop a plan for supervision of on-the-job training.
363. Inform the administration of the coordination itinerary.
364. Assess the on-the-job experience daily reports with the student-learner to plan future instruction.
365. Encourage the on-the-job instructor to follow the training plan in providing experiences for the student-learner.
366. Maintain the student-learner's progress reports for on-the-job training and related instruction.
367. Examine the student-learner's progress reports to determine future on-the-job training experiences and related instruction.
368. Maintain a record of individual work hours, wages, and work experiences of on-the-job training.
369. Assist the student-learner in the solution of problems related to on-the-job training.
370. Control student-learner absenteeism from school and on-the-job training.
371. Control the transfer of student-learners within the cooperative vocational education program and to other school programs.
372. Conduct termination procedures for on-the-job training for the student-learner when conditions demand it.

373. Sponsor an employer-employee appreciation event.
374. Evaluate the student-learner's work qualities and habits on the job.
375. Evaluate the student-learner's personal traits and characteristics on the job.
376. Check the student-learner's progress in acquiring skills on the job.
377. Check the student-learner's progress with the on-the-job instructor and other training station personnel.
378. Assess the student-learner's performance with the assistance of the on-the-job instructor.
379. Obtain suggestions from the on-the-job instructor to guide the selection of lessons for related instruction.
380. Evaluate the quality of the on-the-job training received by the student-learner.
381. Provide a workshop to assist on-the-job instructors in techniques for teaching student-learners.
382. Assist the on-the-job instructor with development of teaching techniques during supervisory visits to the training station.
383. Update related instruction for student-learners on the basis of information on technology obtained from cooperating employers.
384. Obtain information from the advisory committee on ways to improve related instruction and on-the-job training.

Appendix C

MODULE TITLES, OBJECTIVES, AND ASSOCIATED PERFORMANCE ELEMENTS

Module	Title	Competencies[4]
A-1	**PREPARE FOR A COMMUNITY SURVEY**	**1–12, 14, 15**

Enabling Objectives:

1. After completing the required reading, develop a plan to obtain administrative approval for conducting a community survey.
2. After completing the required reading, develop a plan to organize a steering committee to assist with a community survey.
3. After completing the required reading, identify the geographical area in which to conduct a community survey.
4. After completing the required reading, write letters to hypothetical people in local and state agencies; and critique the performance of a teacher in a given case study in contacting a labor leader.
5. After completing the required reading, develop a complete plan for conducting a community survey using the background information given.

Terminal Objective:

While working in an actual school situation, prepare for a community survey.

A-2	**CONDUCT A COMMUNITY SURVEY**	**13, 16, 17**

Enabling Objectives:

1. After completing the required reading, critique the performance of a teacher in a given case study in planning for publicizing the purposes and objectives of a community survey.
2. After completing the required reading, critique the performance of a teacher in given case situations in directing a community survey.

Terminal Objective:

While working in an actual school situation, conduct a community survey.

A-3	**REPORT THE FINDINGS OF A COMMUNITY SURVEY**	**18, 19**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and important considerations involved in organizing data from a community survey.
2. After completing the required reading, demonstrate ability to analyze data from a community survey.

---

[4] Numbers in this column relate to item numbers for each of the 384 performance elements identified in Calvin J. Cotrell *et al.*, *Model Curricula for Vocational and Technical Teacher Education: Report No. V, General Objectives—Set II* (Columbus, OH: The Center for Vocational Education, The Ohio State University, 1972).

3. After completing the required reading, demonstrate ability to present community survey data using appropriate tables and graphs.
4. After completing the required reading, use the information provided in a given case situation to outline a report and a dissemination plan for a community survey.

Terminal Objective:

While working in an actual school situation, report the findings of a community survey.

A-4 ORGANIZE AN OCCUPATIONAL ADVISORY COMMITTEE 20-24

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the procedures for organizing an occupational advisory committee.
2. Given several case studies involving typical vocational program settings, assess each situation and indicate the steps which should be taken in organizing or reorganizing an occupational advisory committee.

Terminal Objective:

While working in an actual school situation, organize an occupational advisory committee.

A-5 MAINTAIN AN OCCUPATIONAL ADVISORY COMMITTEE 25-29

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the procedures for maintaining a newly organized or reorganized occupational advisory committee.
2. After completing the required reading, demonstrate knowledge of the procedures for maintaining an existing occupational advisory committee.
3. Given a case study describing how a hypothetical teacher maintained an occupational advisory committee, critique the performance of that teacher.

Terminal Objective:

While working in an actual school situation, maintain an occupational advisory committee.

A-6 DEVELOP PROGRAM GOALS AND OBJECTIVES 30, 31, 38, 52

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale for, and the concepts involved in, developing vocational program goals and objectives.
2. After completing the required reading, write program goals and objectives for a selected vocational program within your service area.

Terminal Objective:

While working in an actual school situation, develop program goals and objectives.

A-7 CONDUCT AN OCCUPATIONAL ANALYSIS 32-35

Enabling Objectives:

1. After completing the required reading, define the scope of an occupational analysis.

2. After completing the required reading, prepare an initial listing of duty and task statements by partially analyzing a selected occupation.
3. After completing the required reading, verify an initial listing of task and duty statements.
4. After completing the required reading, analyze and report the task inventory data.

Terminal Objective:

While working in an actual school situation, conduct an occupational analysis.

A-8 **DEVELOP A COURSE OF STUDY** **34-39**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the purposes and basic components of a course of study.
2. After completing the required reading, critique the performance of a hypothetical teacher in a given case study in developing a course of study.

Terminal Objective:

While working in an actual school situation, develop a course of study.

A-9 **DEVELOP LONG-RANGE PROGRAM PLANS** **40-45**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts involved in developing long-range plans for a vocational program.
2. After completing the required reading, develop a section of a long-range plan for a vocational program.

Terminal Objective:

While working in an actual school situation, develop long-range program plans.

A-10 **CONDUCT A STUDENT FOLLOW-UP STUDY** **46-48**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in planning and conducting a student follow-up study.
2. After completing the required reading, develop or adapt a questionnaire which could be used to obtain information from former students described in a given case study.
3. Given sample former student follow-up data, summarize, interpret, and report the data.

Terminal Objective:

While working in an actual school situation, conduct a student follow-up study.

A-11 **EVALUATE YOUR VOCATIONAL PROGRAM** **49-51**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts and procedures involved in evaluating a local vocational education program.

2. After completing the required reading, develop a plan for evaluating the hypothetical vocational program described in a given case situation.
3. After completing the required reading, develop a final evaluation report for a hypothetical vocational program described in a given case situation.

Terminal Objective:

While working in an actual school situation, evaluate your vocational program.

[redacted]

Module	Title	Competencies
B–1	DETERMINE NEEDS AND INTERESTS OF STUDENTS	55

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale and procedures for determining the needs and interests of students.
2. After completing the required reading, analyze the cumulative records of some hypothetical students to determine the needs and interests of those students.
3. After examining the data in the cumulative folder of a hypothetical student, plan for obtaining additional information on the student's needs and interests.

Terminal Objective:

In an actual school situation, determine the needs and interests of students.

B–2	DEVELOP STUDENT PERFORMANCE OBJECTIVES	39, 53, 54

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale for developing student performance objectives and the characteristics of properly stated objectives.
2. After completing the required reading, analyze and (if necessary) rewrite given student performance objectives.
3. After completing the required reading, identify each of the objectives on a given list as being primarily cognitive, psychomotor, or affective.
4. Using resources which provide vocational program content information, develop student performance objectives in each of the learning domains which contain statements of performance, condition, and criterion.
5. After completing the required reading, sequence a given list of student performance objectives.

Terminal Objective:

While working in an actual school situation, develop student performance objectives.

B–3	DEVELOP A UNIT OF INSTRUCTION	56–61

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts involved in planning a unit of instruction.

2. After completing the required reading, demonstrate knowledge of the principles involved in selecting objectives, learning activities, and evaluation procedures for an instructional unit.
3. After completing the required reading, organize the content of a hypothetical teacher's plan into a unit plan, using an accepted format.
4. For a simulated situation, develop a unit of instruction.

Terminal Objective:

While working in an actual school situation, develop a unit of instruction.

B-4 **DEVELOP A LESSON PLAN** **62-69**

Enabling Objectives:

1. After completing the required reading, critique a given lesson plan.
2. Utilizing your present knowledge of how to teach, write a preliminary lesson plan.
3. During the remainder of your teacher training experience, complete a minimum number of modules containing those skills necessary to write effective lesson plans.

Terminal Objective:

While working in an actual school situation, develop a lesson plan.

B-5 **SELECT STUDENT INSTRUCTIONAL MATERIALS** **70-72, 75**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in selecting and obtaining student instructional materials.
2. Given a case study describing one teacher's procedures for selecting and obtaining student instructional materials for a lesson plan, critique the performance of that teacher.

Terminal Objective:

While working in an actual school situation, select student instructional materials.

B-6 **PREPARE TEACHER-MADE INSTRUCTIONAL MATERIALS** **73, 74, 76-78**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of (1) the types of teacher-made handouts and transparencies, and (2) criteria for selecting which type to use.
2. After completing the required reading, demonstrate knowledge of (1) four methods of duplicating teacher-made handouts and transparencies, and (2) criteria for selecting which method to use.
3. Using the materials provided, prepare masters for four types of duplicating machines and use those machines to prepare copies.
4. Given case studies describing how four teachers prepared and duplicated teacher-made materials, critique the performance of those teachers.

Terminal Objective:

While working in an actual school situation, prepare teacher-made instructional materials.

[redacted]

Module **Title** **Competencies**

C-1 **DIRECT FIELD TRIPS** **79, 80**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale for, and procedures involved in, directing field trips.
2. In a simulated situation, direct or critique the direction of an individual field trip.
3. In a simulated situation, direct or critique the direction of a group field trip.

Terminal Objective:

While working in an actual school situation, direct field trips.

C-2 **CONDUCT GROUP DISCUSSIONS, PANEL DISCUSSIONS, AND SYMPOSIUMS** **81, 95, 96**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures for conducting a group discussion, panel discussion, and symposium.
2. Given a case study describing how a hypothetical teacher conducted a group discussion, critique the performance of that teacher.
3. Given a case study describing how a hypothetical teacher planned a panel discussion, critique the performance of that teacher.
4. Given a case study describing how a hypothetical teacher conducted a symposium, critique the performance of that teacher.

Terminal Objective:

In an actual school situation, conduct a group discussion, panel discussion, and symposium.

C-3 **EMPLOY BRAINSTORMING, BUZZ GROUP, AND QUESTION BOX TECHNIQUES** **82, 97, 98**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the purposes of, and the steps to follow in, using brainstorming, buzz group, and question box techniques.
2. Given case studies of teachers employing brainstorming, buzz group, and question box techniques, critique the performance of those teachers.

Terminal Objective:

In an actual school situation, employ brainstorming, buzz group, and question box techniques.

C-4 **DIRECT STUDENTS IN INSTRUCTING OTHER STUDENTS** **83, 84**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the advantages of, and rationale and procedures for, directing students in instructing other students.

2. Given case studies of teachers using students as tutors and presenters, critique the performance of those teachers.

Terminal Objective:

In an actual school situation, direct students in instructing other students.

C-5 EMPLOY SIMULATION TECHNIQUES 85, 99

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the various types of simulation techniques and the characteristics of each.
2. For simulated situations, use or critique the use of simulation techniques.
3. For simulated classroom situations, use or critique/describe the use of role-playing techniques.

Terminal Objective:

In an actual school situation, employ simulation techniques.

C-6 GUIDE STUDENT STUDY 86, 91, 92, 117, 221

Enabling Objectives:

1. After completing the required reading, critique the performance of teachers in given case studies in presenting student assignments.
2. After completing the required reading, critique the performance of teachers in given case studies in conducting group supervised study.

Terminal Objective:

In an actual school situation, guide student study.

C-7 DIRECT STUDENT LABORATORY EXPERIENCE 87, 93, 94

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the procedures involved in directing student laboratory experience.
2. After completing the required reading, develop a job sheet to guide student progress in the laboratory.
3. After completing the required reading, develop an operation sheet to guide student progress in completing a job.
4. After completing the required reading, develop an information sheet to provide students with information relating to planned laboratory experience.
5. After completing the required reading, critique the performance of the teacher in a given case study in directing students in developing work plans.
6. Given a case study of a teacher directing student laboratory experience, critique the performance of that teacher.

Terminal Objective:

In an actual school situation, direct student laboratory experience.

C-8 DIRECT STUDENTS IN APPLYING PROBLEM-SOLVING TECHNIQUES 88, 89

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of problem-solving techniques and how to use problem-solving as an instructional method.
2. Given a simulated problem situation, direct, or critique the direction of, a student in applying problem-solving techniques.
3. For a simulated classroom situation, execute, or critique the execution of, a problem-solving lesson.

Terminal Objective:

In an actual school situation, direct students in applying problem-solving techniques.

C-9 EMPLOY THE PROJECT METHOD 90

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in employing the project method.
2. Given a series of case study episodes, demonstrate how you would employ the project method.

Terminal Objective:

In an actual school situation, employ the project method.

C-10 INTRODUCE A LESSON 100

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the elements of an effective lesson introduction.
2. Given an actual teacher presenting a lesson introduction, or two case scripts of teachers introducing a lesson, rate the performance of the teacher(s).
3. In a simulated classroom or laboratory situation, introduce a lesson.

Terminal Objective:

In an actual school situation, introduce a lesson.

C-11 SUMMARIZE A LESSON 101

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the purposes and methods of summarizing a lesson.
2. Given a case script of a teacher summarizing a lesson, critique the performance of that teacher.
3. In a simulated classroom or laboratory situation, summarize a lesson.

Terminal Objective:

In an actual school situation, summarize a lesson.

C–12 EMPLOY ORAL QUESTIONING TECHNIQUES 102

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures involved in effective oral questioning.
2. After selecting a student performance objective in your occupational specialty, develop a series of oral questions relating to that objective.
3. In a simulated classroom situation, employ oral questioning techniques in a lesson.

Terminal Objective:

In an actual school situation, employ oral questioning techniques.

C–13 EMPLOY REINFORCEMENT TECHNIQUES 103, 105, 107, 109

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the types and uses of reinforcement techniques in teaching.
2. After observing a teacher giving a lesson, critique the teacher's use of reinforcement techniques.
3. In a simulated classroom situation, employ or plan for the employment of reinforcement techniques.

Terminal Objective:

In an actual school situation, employ reinforcement techniques.

C–14 PROVIDE INSTRUCTION FOR SLOWER AND MORE CAPABLE LEARNERS 104, 106

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the characteristics of slower and more capable learners, and of how to plan instruction to meet their individual needs.
2. Given descriptions of hypothetical slower and more capable learners, plan a lesson designed to meet the needs of those students.

Terminal Objective:

In an actual school situation, provide instruction for slower and more capable learners.

C–15 PRESENT AN ILLUSTRATED TALK 108, 112–114

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of how to present an illustrated talk.
2. Given a case script of a teacher presenting an illustrated talk, critique the performance of that teacher.
3. In a simulated classroom situation, present an illustrated talk.

Terminal Objective:

In an actual school situation, present an illustrated talk.

C-16 DEMONSTRATE A MANIPULATIVE SKILL 110

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in demonstrating a manipulative skill.
2. In a simulated classroom or laboratory situation, demonstrate a manipulative skill.

Terminal Objective:

In an actual school situation, demonstrate a manipulative skill.

C-17 DEMONSTRATE A CONCEPT OR PRINCIPLE 111

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in demonstrating a concept or principle.
2. Given a case script of a teacher demonstrating a principle, critique the performance of that teacher.
3. In a simulated classroom or laboratory situation, demonstrate a concept or principle.

Terminal Objective:

In an actual school situation, demonstrate a concept or principle.

C-18 INDIVIDUALIZE INSTRUCTION 115, 143

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts and characteristics of individualized instruction.
2. After completing the required reading, develop and carry out a personal learning experience related to individualized instruction.
3. For a simulated classroom or laboratory situation, prepare written instructional plans and procedures for individualizing instruction for a unit in your occupational specialty.
4. Given a case study describing how a teacher individualized instruction, critique the performance of that teacher.

Terminal Objective:

In an actual school situation, individualize instruction.

C-19 EMPLOY THE TEAM TEACHING APPROACH 116

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the principles and procedures involved in employing the team teaching approach.
2. As a member of a simulated teaching team, plan, present, and evaluate a lesson.

Terminal Objective:

In an actual school situation, employ the team teaching approach.

C–20 USE SUBJECT MATTER EXPERTS TO PRESENT INFORMATION 118, 130

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale and procedures for using a subject matter expert.
2. In a simulated classroom or laboratory situation, use a subject matter expert to present information.

Terminal Objective:

In an actual school situation, use a subject matter expert to present information.

C–21 PREPARE BULLETIN BOARDS AND EXHIBITS 119, 120

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts involved in the instructional use of bulletin boards and exhibits in the classroom.
2. After completing the required reading, prepare a bulletin board display relating to a student performance objective in your occupational specialty.
3. After completing the required reading, prepare an exhibit relating to a student performance objective in your occupational specialty.

Terminal Objective:

In an actual school situation, prepare bulletin boards and exhibits.

C–22 PRESENT INFORMATION WITH MODELS, REAL OBJECTS, AND FLANNEL BOARDS 121, 136

Enabling Objectives:

1. After completing the required reading, present information with a flannel board.
2. After completing the required reading, present information with a model or real object.

Terminal Objective:

In an actual school situation, present information with a flannel board and a model or a real object.

C–23 PRESENT INFORMATION WITH OVERHEAD AND OPAQUE MATERIALS 122, 123

Enabling Objectives:

1. After completing the required reading, set up and operate overhead equipment.
2. After completing the required reading, present information with overhead materials and equipment in a practice situation.
3. After completing the required reading, set up and operate opaque equipment.
4. After completing the required reading, present information with opaque materials and equipment in a practice situation.

Terminal Objective:

In an actual school situation, present information with overhead and/or opaque materials.

C–24 PRESENT INFORMATION WITH FILMSTRIPS AND SLIDES 124, 125

Enabling Objectives:

1. After completing the required reading, set up and operate a filmstrip projector.
2. After completing the required reading, present information with filmstrips in a practice situation.
3. After completing the required reading, set up and operate a slide projector.
4. After completing the required reading, present information with slides in a practice situation.

Terminal Objective:

In an actual school situation, present information with filmstrips and slides.

C–25 PRESENT INFORMATION WITH FILMS 126, 127

Enabling Objectives:

1. After completing the required reading, set up and operate a film projector.
2. After completing the required reading, present information with films in a practice situation.

Terminal Objective:

In an actual school situation, present information with films.

C–26 PRESENT INFORMATION WITH AUDIO RECORDINGS 128, 131

Enabling Objectives:

1. After completing the required reading, set up and operate a record player.
2. After completing the required reading, present information with records in a practice situation.
3. After completing the required reading, set up and operate a reel-to-reel tape recorder.
4. After completing the required reading, present information with prerecorded tapes in a practice situation.

Terminal Objective:

In an actual school situation, present information with audio recordings.

C–27 PRESENT INFORMATION WITH TELEVISED AND VIDEOTAPED MATERIALS 129, 132

Enabling Objectives:

1. After completing the required reading, set up and operate videotape equipment.
2. After completing the required reading, present information with a videotaped and/or televised program in a practice situation.

Terminal Objective:

In an actual school situation, present information with videotaped and/or televised materials.

C-28 **EMPLOY PROGRAMMED INSTRUCTION** **133-135**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the characteristics of programmed instruction.
2. For simulated situations, employ or critique the employment of programmed instruction.

Terminal Objective:

In an actual school situation, employ programmed instruction.

C-29 **PRESENT INFORMATION WITH THE CHALKBOARD AND FLIP CHART** **137, 138**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the factors related to using the chalkboard and flip chart to present information.
2. In a simulated classroom or laboratory situation, present information with both the chalkboard and flip chart.

Terminal Objective:

In an actual school situation, present information with a chalkboard and/or a flip chart.

[redacted]

Module **Title** **Competencies**

D-1 **ESTABLISH STUDENT PERFORMANCE CRITERIA** **139**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the key factors involved in establishing criteria for student performance.
2. Given a case situation, establish partial criteria for student performance and identify additional information and sources needed to establish complete criteria for student performance.

Terminal Objective:

While working in an actual school situation, establish student performance criteria.

D-2 **ASSESS STUDENT PERFORMANCE: KNOWLEDGE** **142, 149-153, 156-160**

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures for assessing student cognitive performance.
2. Using selected cognitive performance objectives, construct five multiple-choice test items to measure their achievement.
3. Using selected cognitive performance objectives, construct a matching item to measure their achievement.

4. Using selected cognitive performance objectives, construct five completion test items to measure their achievement.
5. Using selected cognitive performance objectives, construct ten true-false test items to measure their achievement.
6. Using selected cognitive performance objectives, construct three essay test items to measure their achievement.
7. Using a selected cognitive performance objective, construct one case study/problem-solving test item to measure its achievement.
8. Using selected cognitive performance objectives, construct five oral test items to measure their achievement.

Terminal Objective:

In an actual school situation, assess student cognitive (knowledge) performance.

D-3

ASSESS STUDENT PERFORMANCE: ATTITUDES

142, 149, 156, 158–160

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale and techniques for assessing student affective performance.
2. After completing the required reading, construct five different types of evaluation items and devices to assess achievement of a given affective student performance objective.

Terminal Objective:

In an actual school situation, assess student affective (attitudes) performance.

D-4

ASSESS STUDENT PERFORMANCE: SKILLS

141, 142, 144–146, 154, 155, 157, 159, 160

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in selecting and administering evaluation devices for assessing student psychomotor performance.
2. After completing the required reading, construct a performance test for evaluating student achievement of a psychomotor performance objective.

Terminal Objective:

In an actual school situation, assess student psychomotor (skills) performance.

D-5

DETERMINE STUDENT GRADES

140, 147

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the functions of grades and the systems of grading.
2. Given case studies describing how vocational teachers determined student grades, critique the performance of those teachers.

Terminal Objective:

While working in an actual school situation, determine student grades.

D-6 EVALUATE YOUR INSTRUCTIONAL EFFECTIVENESS 148, 161–164

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the principles and procedures involved in evaluating instructional effectiveness.
2. Given a case study of a teacher evaluating her instructional effectiveness, critique the performance of that teacher.

Terminal Objective:

While working in an actual school situation, evaluate your instructional effectiveness.

[redacted]

Module **Title** **Competencies**

E-1 PROJECT INSTRUCTIONAL RESOURCE NEEDS 165–167

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts and procedures involved in projecting instructional resource needs.
2. Given a case study describing how a hypothetical teacher projected instructional resource needs, critique the performance of that teacher.

Terminal Objective:

In an actual school situation, project instructional resource needs.

E-2 MANAGE YOUR BUDGETING AND REPORTING RESPONSIBILITIES 168–170, 172–175, 177

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in managing your budgeting and reporting responsibilities.
2. Given case studies describing how hypothetical teachers handled their budgeting and reporting responsibilities, critique the performance of those teachers.

Terminal Objective:

In an actual school situation, manage your budgeting and reporting responsibilities.

E-3 ARRANGE FOR IMPROVEMENT OF YOUR VOCATIONAL FACILITIES 171

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in, and the procedures for, improving your vocational facilities.
2. Given a case study describing how a hypothetical teacher planned improvements in his program facilities, critique the performance of that teacher.

Terminal Objective:

While working in an actual school situation, arrange for improvement of your vocational facilities.

E-4 MAINTAIN A FILING SYSTEM 176, 178–182

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures for organizing various types of filing systems.
2. Given materials or records you have already accumulated, develop a plan for an appropriate filing system.

Terminal Objective:

While working in an actual school situation, maintain a filing system.

E-5 PROVIDE FOR STUDENT SAFETY 183, 185

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures for providing for student safety needs.
2. Based on applicable local, state, and federal safety laws and student performance objectives in your occupational specialty, prepare a safety handbook.
3. For simulated school situations, provide for student safety needs.

Terminal Objective:

In an actual school situation, provide for student safety.

E-6 PROVIDE FOR THE FIRST AID NEEDS OF STUDENTS 184

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps involved in, and the procedures for, providing for the first aid needs of students.
2. After reviewing state and local policies regarding the administration of first aid in the school environment, develop a plan for providing for the first aid needs of students in your occupational specialty.

3. Given case situations describing student injuries, outline the steps to follow in providing emergency treatment for each situation described.

Terminal Objective:

In an actual school situation, provide for the first aid needs of students.

E-7 ASSIST STUDENTS IN DEVELOPING SELF-DISCIPLINE 186–191

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts of, and important considerations involved in, classroom discipline.
2. After reviewing relevant materials, develop acceptable standards of behavior for the vocational classroom and laboratory.
3. Given several case studies describing how hypothetical teachers handled classroom discipline problems, critique the performance of those teachers.

Terminal Objective:

In an actual school situation, assist students in developing self-discipline.

E-8 ORGANIZE THE VOCATIONAL LABORATORY 194, 198, 199

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the principles and procedures involved in organizing a vocational laboratory.
2. Given an actual vocational laboratory in your occupational specialty, evaluate the organization of the laboratory and develop plans for its improvement.

Terminal Objective:

In an actual school situation, organize the vocational laboratory.

E-9 MANAGE THE VOCATIONAL LABORATORY 192, 193, 195–197 200, 201

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the principles and procedures involved in managing a vocational laboratory.
2. After completing the required reading, plan an inventory control system for a vocational laboratory in your occupational specialty.
3. After completing the required reading, plan an equipment maintenance system for a vocational laboratory in your occupational specialty.
4. After completing the required reading, plan a student personnel system for a vocational laboratory in your occupational specialty.
5. Given an actual vocational laboratory in your occupational specialty, evaluate the management system of the laboratory and develop plans for its improvement.

Terminal Objective:

In an actual school situation, manage the vocational laboratory.

Module	Title	Competencies
F-1	GATHER STUDENT DATA USING FORMAL DATA-COLLECTION TECHNIQUES	202–208, 212, 222, 223, 228, 229

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the types and uses of student data-collection sources and techniques.
2. Given sample data collected on a hypothetical student, critique the form and content of the data samples.

Terminal Objective:

While working in an actual school situation, gather student data using formal data-collection techniques.

F-2	GATHER STUDENT DATA THROUGH PERSONAL CONTACTS	209, 212, 214–216, 222, 226

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures for gathering student data through personal contacts.
2. Given a case script of a teacher conducting a parent-teacher-student conference, critique the performance of that teacher.
3. For simulated situations, plan personal contacts to gather student data.

Terminal Objective:

In an actual school situation, gather student data through personal contacts.

F-3	USE CONFERENCES TO HELP MEET STUDENT NEEDS	210–212, 217–220, 222, 224, 225, 227

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations and techniques involved in using conferences to help students meet their needs.
2. Given case scripts describing how teachers met student needs through conferences, critique the performance of those teachers.
3. Given case situations involving student problems, plan conferences to meet the needs described.

Terminal Objective:

In an actual school situation, use conferences to help meet student needs.

F–4 **PROVIDE INFORMATION ON EDUCATIONAL AND CAREER OPPORTUNITIES** 212, 213, 222, 230, 231

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures involved in providing students with educational and career information.
2. In a simulated classroom or laboratory situation, provide information on educational and career opportunities.

Terminal Objective:

In an actual school situation, provide information on educational and career opportunities.

F–5 **ASSIST STUDENTS IN APPLYING FOR EMPLOYMENT OR FURTHER EDUCATION** 212, 232–235

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the basic techniques involved in assisting students in applying for employment or further education.
2. Given a hypothetical student's application materials, critique the student's performance in applying for a job, and use the data provided to write a letter of recommendation.
3. In a simulated situation, plan a unit of instruction designed to assist students in applying for employment or further education.

Terminal Objective:

In an actual school situation, assist students in applying for employment or further education.

[redacted]

Module	Title	Competencies
G–1	**DEVELOP A SCHOOL-COMMUNITY RELATIONS PLAN FOR YOUR VOCATIONAL PROGRAM**	236–239, 248

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale for, and the steps and procedures involved in, developing a plan for school-community relations.
2. Given a case study describing a plan for school-community relations developed by a hypothetical teacher, critique the adequacy of that plan.

Terminal Objective:

While working in an actual school situation, develop a school-community relations plan for your vocational program.

G-2 GIVE PRESENTATIONS TO PROMOTE YOUR VOCATIONAL PROGRAM 240, 246

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale for, and techniques involved in, preparing effective presentations.
2. Given a case situation describing a hypothetical school situation, prepare and give a presentation designed to promote your vocational education program.
3. After completing the required reading, critique the performance of several teachers in given case studies in directing students in preparing presentations.

Terminal Objective:

While working in an actual school situation, give presentations to promote your vocational program.

G-3 DEVELOP BROCHURES TO PROMOTE YOUR VOCATIONAL PROGRAM 241

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in planning, preparing, producing, and distributing a brochure to promote a vocational program.
2. Given examples of brochures designed to promote vocational programs, critique these brochures.

Terminal Objective:

While working in an actual school situation, develop a brochure to promote your vocational program.

G-4 PREPARE DISPLAYS TO PROMOTE YOUR VOCATIONAL PROGRAM 242

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in preparing displays to promote a vocational program.
2. After completing the required reading, develop a plan for a display to promote your vocational program.
3. After completing the required reading, construct and install a promotional display.

Terminal Objective:

While working in an actual school situation, prepare displays designed to promote your vocational program.

G-5 PREPARE NEWS RELEASES AND ARTICLES CONCERNING YOUR VOCATIONAL PROGRAM 243

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in writing news releases and articles.
2. After completing the required reading, write a news release concerning a vocational education program.
3. After completing the required reading, write an article concerning vocational education or a vocational program.

Terminal Objective:

While working in an actual school situation, prepare news releases and articles concerning your vocational program.

G-6 ARRANGE FOR TELEVISION AND RADIO PRESENTATIONS CONCERNING YOUR VOCATIONAL PROGRAM 244, 245

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in planning and presenting television and radio presentations concerning a vocational program.
2. In a simulated situation, present a radio presentation concerning a vocational program.
3. In a simulated situation, present a television presentation concerning a vocational program.

Terminal Objective:

While working in an actual school situation, arrange for a television or radio presentation concerning your vocational program.

G-7 CONDUCT AN OPEN HOUSE 247

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts and important considerations involved in planning and conducting an open house to promote a vocational program.
2. Given a case study describing how a hypothetical teacher planned and conducted an open house, critique the performance of that teacher.

Terminal Objective:

While working in an actual school situation, conduct an open house.

G-8 WORK WITH MEMBERS OF THE COMMUNITY 249–256

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the reasons for, and the methods of, working with members of the community.
2. After locating businesses and organizations which relate to your vocational service area, plan how you could work with them.

Terminal Objective:

While working in an actual school situation, work with members of the community.

G-9 WORK WITH STATE AND LOCAL EDUCATORS 257, 258, 267–269

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the basic concepts involved in working with state and local educators.
2. Given case studies describing how three teachers worked with other educators, critique the performance of those teachers.

Terminal Objective:

While working in an actual school situation, work with state and local educators.

G–10 OBTAIN FEEDBACK ABOUT YOUR VOCATIONAL PROGRAM 259–266

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale for, and steps and procedures involved in, obtaining feedback from the school and community concerning your vocational program.
2. Given a case situation describing the professional problems of a hypothetical teacher, develop a plan for obtaining feedback from the school and community which that teacher could use in solving those problems.

Terminal Objective:

While working in an actual school situation, obtain feedback about your vocational program.

[redacted]

Module **Title** **Competencies**

H–1 DEVELOP A PERSONAL PHILOSOPHY CONCERNING STUDENT VOCATIONAL ORGANIZATIONS 270

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the purpose, goals, and values of a student vocational organization in your service area.
2. After completing the required reading, prepare a written rationale of a student vocational organization in your service area.

Terminal Objective:

While serving as an advisor in an actual school situation, develop and demonstrate a personal philosophy concerning student vocational organizations.

H–2 ESTABLISH A STUDENT VOCATIONAL ORGANIZATION 270–275, 277, 280, 292

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in establishing a student vocational organization.
2. Given a case study describing how a hypothetical advisor established a student vocational organization, critique the performance of that advisor.

Terminal Objective:

In an actual school situation, establish a student vocational organization.

H-3

PREPARE STUDENT VOCATIONAL ORGANIZATION MEMBERS FOR LEADERSHIP ROLES

276, 278, 279, 282, 295

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in preparing student vocational organization members for leadership roles.
2. Given a case situation describing how a hypothetical advisor prepared student vocational organization members for leadership roles, critique the performance of that advisor.

Terminal Objective:

While serving as an advisor in an actual school situation, prepare student vocational organization members for leadership roles.

H-4

ASSIST STUDENT VOCATIONAL ORGANIZATION MEMBERS IN DEVELOPING AND FINANCING A YEARLY PROGRAM OF ACTIVITIES

281, 286, 287, 289

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures involved in assisting student vocational organization members in developing and financing a yearly program of activities.
2. Given several case studies describing how hypothetical advisors assisted student vocational organization members in developing and financing a yearly program of activities, critique the performance of these advisors.

Terminal Objective:

While serving as an advisor in an actual school situation, assist student vocational organization members in developing and financing a yearly program of activities.

H-5

SUPERVISE ACTIVITIES OF THE STUDENT VOCATIONAL ORGANIZATION

283–285, 288, 290, 291, 293, 298

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the important considerations involved in supervising the activities of a student vocational organization.
2. Given a case study describing one advisor's procedures for supervising the activities of a student vocational organization, critique the performance of that advisor.

Terminal Objective:

While serving as an advisor in an actual school situation, supervise the activities of a student vocational organization.

H-6

GUIDE PARTICIPATION IN STUDENT VOCATIONAL ORGANIZATION CONTESTS

294–297

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts, steps, and procedures involved in guiding participation in student vocational organization contests.
2. Given several case studies describing how hypothetical advisors guided participation in student vocational organization contests, critique the performance of those advisors.

Terminal Objective:

While serving as an advisor in an actual school situation, guide participation in student vocational organization contests.

[redacted]

Module	Title	Competencies
I–1	KEEP UP TO DATE PROFESSIONALLY	299, 304, 318, 319

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the concepts involved in, and evaluate your current position in terms of, keeping up to date in your profession.
2. After identifying available resources, use these resources to help you keep up to date in your profession and in your occupational specialty.

Terminal Objective:

While working in an actual school situation, keep up to date professionally.

I–2	SERVE YOUR TEACHING PROFESSION	300, 305–309

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the vocational teacher's role in serving the profession.
2. Given a case study describing how a particular teacher fulfilled his responsibilities to the profession, critique the performance of that teacher.

Terminal Objective:

While working in an actual school situation, serve your teaching profession.

I–3	DEVELOP AN ACTIVE PERSONAL PHILOSOPHY OF EDUCATION	301–303

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the need for developing and maintaining a personal philosophy of education.
2. After completing the required reading, prepare a written statement expressing your personal philosophy of education and describing the behaviors you would exhibit as a teacher as a result of each belief.
3. After completing the required reading, critique the ethical standards implied in a 1927 teachers' contract and stated in the 1975 National Education Association's code of ethics.
4. Given a case study describing the actions of a particular teacher, critique that teacher's performance using your own personal philosophy of education and ethical standards.
5. After completing the required reading, prepare a written statement expressing your personal philosophy of vocational education and describing the behaviors you would exhibit as a teacher as a result of each belief.

Terminal Objective:

While working in an actual school situation, develop an active personal philosophy of education.

I–4 SERVE THE SCHOOL AND COMMUNITY 310–312, 321, 322

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the ways in which a vocational teacher can effectively serve the school and community.
2. Given a case study describing how a hypothetical teacher handled his noninstructional responsibilities to the school and community, critique the performance of that teacher.

Terminal Objective:

While working in an actual school situation, serve the school and community.

I–5 OBTAIN A SUITABLE TEACHING POSITION 313–317, 320

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the procedures for selecting, obtaining, and maintaining a teaching position.
2. After developing a personal/professional profile, simulate the procedures for selecting a suitable teaching position.

Terminal Objective:

At a time when you will be seeking employment, obtain a suitable teaching position.

I–6 PROVIDE LABORATORY EXPERIENCES FOR PROSPECTIVE TEACHERS 323, 325

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the role of the cooperating teacher in planning and providing laboratory experiences for prospective teachers.
2. After completing the required reading, prepare a file of relevant information about the community, the school, and the vocational program to aid prospective teachers.
3. After completing the required reading, plan a graduated series of laboratory experiences for prospective teachers.
4. After completing the required reading, construct a series of teaching episode lesson plans.

Terminal Objective:

While serving as a cooperating teacher in an actual school situation, provide laboratory experiences for prospective teachers.

I–7 PLAN THE STUDENT TEACHING EXPERIENCE 324–326, 330

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the rationale for, and activities which should be included in, the student teaching experience.
2. After completing the required reading, prepare and present information on the standard operating procedures of your school and your vocational program.

3. After completing the required reading, assign student teaching responsibilities to a hypothetical student teacher in a given case study.
4. After completing the required reading, develop a plan for evaluating student teacher progress throughout the student teaching experience.

Terminal Objective:

While serving as a cooperating teacher in an actual school situation, plan the student teaching experience.

I-8	**SUPERVISE STUDENT TEACHERS**	327–329

Enabling Objectives:

1. After completing the required reading, demonstrate an instructional technique to a peer role-playing a student teacher.
2. After completing the required reading, critique the performance of a hypothetical cooperating teacher in a given case script in conducting a student teaching conference.
3. After completing the required reading, critique the performance of a student teacher in a videotape in presenting a lesson.

Terminal Objective:

While serving as a cooperating teacher in an actual school situation, supervise a student teacher.

[redacted]

Module	**Title**	**Competencies**
J-1	**ESTABLISH GUIDELINES FOR YOUR COOPERATIVE VOCATIONAL PROGRAM**	331, 339, 341, 354–356

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the characteristics of a cooperative vocational education program.
2. After completing the required reading, develop tentative criteria for screening prospective students.
3. After completing the required reading, develop tentative criteria for evaluating prospective training stations.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, establish guidelines for your cooperative vocational program.

J-2	**MANAGE THE ATTENDANCE, TRANSFERS, AND TERMINATIONS OF CO-OP STUDENTS**	370–372

Enabling Objectives:

1. After completing the required reading, outline policies for managing student attendance, transfers, and terminations.
2. Given several case situations involving student management problems, identify each problem and possible solutions to each problem.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, manage the attendance, transfers, and terminations of co-op students.

J-3 ENROLL STUDENTS IN YOUR CO-OP PROGRAM 332–336

Enabling Objectives:

1. After completing the required reading and viewing the slide/tape, demonstrate knowledge of the techniques used in identifying and enrolling prospective students.
2. Given screening criteria and recruitment data for a hypothetical prospective student, decide tentatively whether to enroll that student in the cooperative program.
3. Given screening criteria and recruitment data for a hypothetical prospective student, decide tentatively whether to enroll that student in the cooperative program.
4. Given screening criteria and recruitment data for a hypothetical prospective student, decide tentatively whether to enroll that student in the cooperative program.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, enroll students in your co-op program.

J-4 SECURE TRAINING STATIONS FOR YOUR CO-OP PROGRAM 337, 340, 342–345

Enabling Objectives:

1. After completing the required reading, critique the training station identification and assessment techniques used by a hypothetical teacher in a given case study.
2. After completing the required reading, answer an employer's questions in a given case script and convince him to provide a training station.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, secure training stations for your co-op program.

J-5 PLACE CO-OP STUDENTS ON THE JOB 337, 338, 346–353, 357

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures for placing a student on the job.
2. Given student data on three hypothetical students, tentatively match each student to the appropriate training station.
3. For a hypothetical cooperative program in your service area, develop or revise a training agreement form which could be used in placing students on the job.
4. Based on the preservice or inservice training program in which you are now involved, develop a training plan for yourself.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation place co-op students on the job.

J-6 DEVELOP THE TRAINING ABILITY OF ON-THE-JOB INSTRUCTORS

359, 360, 365, 380–382

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the techniques and procedures for developing the training ability of on-the-job instructors.
2. Given a case script of a teacher-coordinator conferring with a cooperating employer, critique the performance of that teacher-coordinator.
3. Given a case script of a teacher-coordinator conferring with an on-the-job instructor and a student who has an instructional problem, determine how the teacher-coordinator could develop the training ability of that instructor.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, develop the training ability of on-the-job instructors.

J-7 COORDINATE ON-THE-JOB INSTRUCTION

358, 361–364, 366–369

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the purpose of, and the planning required for, coordinating and supervising on-the-job instruction.
2. Given a case problem containing data on the job placement locations and schedules of students in a cooperative program, and data on the teacher-coordinator's schedule, plan a schedule of coordination visits.
3. Given data on a hypothetical student and his training station situation, make and record observations and recommendations.
4. Given a case study of a teacher-coordinator making a coordination visit, critique the performance of that teacher-coordinator.

Terminal Objective:

While working as a teacher-coordinator in an actual school situation, coordinate on-the-job instruction.

J-8 EVALUATE CO-OP STUDENTS' ON-THE-JOB PERFORMANCE

374–378

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the purposes of, and the techniques for, evaluating co-op students' on-the-job performance.
2. Given a case situation describing a teacher-coordinator's procedures for evaluating a student on the job, critique the performance of that teacher-coordinator.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, evaluate co-op students' on-the-job performance.

J-9 PREPARE FOR STUDENTS' RELATED INSTRUCTION 379, 383, 384

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the steps and procedures to follow in preparing for students' related instruction.
2. Given selected information about five hypothetical students in a multi-occupational cooperative program, prepare for their related instruction.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, prepare for students' related instruction.

J-10 SUPERVISE AN EMPLOYER-EMPLOYEE APPRECIATION EVENT 373

Enabling Objectives:

1. After completing the required reading, demonstrate knowledge of the procedures for supervising students in planning and conducting an employer-employee appreciation event.
2. Given a case study of a teacher-coordinator guiding students in planning an employer-employee appreciation event, critique the performance of that teacher-coordinator.

Terminal Objective:

While serving as a teacher-coordinator in an actual school situation, supervise an employer-employee appreciation event.

Appendix D

TIME ESTIMATES FOR COMPLETION OF THE CENTER'S PBTE MODULES

The figures shown under each module number represent the percentages of teacher trainees completing the module in the time ranges shown during advanced testing of the curricula. These self-estimates of time were made by preservice and inservice teacher trainees upon completion of the field-test version of the individual module and in response to the question, "Approximately how much time (in hours) did you spend completing this module?" It should be noted that the time requirements for inservice teachers to complete specific modules vary widely to the degree that previous work contributes toward module requirements.

CATEGORY A: PROGRAM PLANNING, DEVELOPMENT, AND EVALUATION

HOURS	A-1	A-2	A-3	A-4	A-5	A-6	A-7	A-8	A-9	A-10	A-11
0-1	4.5	31.6	10.5	21.1	3.0	10.0	7.1	5.4	15.4	—	3.7
2-3	59.1	5.3	21.1	47.4	57.6	70.0	19.6	24.3	46.2	41.2	70.4
4-6	18.2	15.8	15.8	22.4	27.3	15.0	25.0	27.0	26.9	17.6	11.1
7-10	18.2	10.5	5.3	6.6	3.0	5.0	17.9	24.3	11.5	17.6	3.7
11-15	—	5.3	15.8	1.3	3.0	—	14.3	8.1	—	17.6	11.1
16+	—	31.6	31.6	1.3	6.1	—	16.1	10.8	—	5.9	—

CATEGORY B: INSTRUCTIONAL PLANNING

HOURS	B-1	B-2	B-3	B-4	B-5	B-6
0-1	15.0	12.2	9.0	9.4	21.8	30.0
2-3	40.9	33.8	36.7	36.3	43.6	41.7
4-6	33.9	29.7	28.8	31.1	28.2	20.0
7-10	7.1	18.9	13.0	16.2	5.1	6.7
11-15	1.6	2.7	8.5	3.4	1.3	1.7
16+	1.6	2.7	4.0	3.7	—	—

CATEGORY C: INSTRUCTIONAL EXECUTION

HOURS	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	C-10	C-11
0-1	14.3	10.1	34.8	6.5	11.1	7.7	10.6	25.4	22.8	15.2	19.5
2-3	35.7	52.2	39.4	41.9	30.6	43.6	41.5	52.4	35.1	49.2	47.3
4-6	28.6	30.4	19.7	27.4	33.3	33.3	24.6	15.9	28.1	20.8	23.8
7-10	14.3	2.9	4.5	11.3	22.2	5.1	16.2	4.8	8.8	9.1	6.6
11-15	7.1	2.9	—	4.8	—	2.6	2.8	1.6	1.8	3.0	2.3
16+	—	1.4	1.5	8.1	2.8	7.7	4.2	—	3.5	2.5	0.4

HOURS	C-12	C-13	C-14	C-15	C-16	C-17	C-18	C-19	C-20	C-21	C-22
0-1	12.7	18.9	15.1	14.1	8.6	9.8	12.0	20.0	5.0	6.2	8.9
2-3	41.5	46.9	46.2	46.5	37.5	41.5	44.0	61.8	50.0	34.5	39.2
4-6	33.8	25.2	24.4	25.3	41.4	32.5	26.0	14.5	20.0	35.4	31.6
7-10	9.9	6.3	10.1	10.1	7.3	11.4	11.0	—	15.0	13.3	12.7
11-15	0.7	1.4	2.5	3.0	3.4	1.6	5.0	—	—	8.0	1.3
16+	1.4	1.4	1.7	1.0	1.7	3.3	2.0	3.6	10.0	2.7	6.3

HOURS	C-23	C-24	C-25	C-26	C-27	C-28	C-29
0-1	19.0	10.8	11.3	20.8	20.0	15.2	23.8
2-3	44.0	50.8	41.5	54.2	46.7	51.5	33.3
4-6	27.4	26.2	34.0	16.7	26.7	24.2	28.6
7-10	7.1	7.7	9.4	4.2	—	9.1	11.1
11-15	2.4	3.1	1.9	—	6.7	—	1.6
16+	—	1.5	1.9	4.2	—	—	1.6

CATEGORY D: INSTRUCTIONAL EVALUATION

HOURS	D-1	D-2	D-3	D-4	D-5	D-6
0-1	12.7	1.2	3.4	6.5	15.8	19.3
2-3	36.5	22.5	43.1	49.5	49.6	48.9
4-6	39.7	38.7	34.5	30.8	23.0	25.0
7-10	3.2	17.5	13.8	8.4	5.0	4.5
11-15	4.8	11.2	1.7	3.7	6.5	—
16+	3.2	6.7	3.4	0.9	—	—

CATEGORY E: INSTRUCTIONAL MANAGEMENT

HOURS	E-1	E-2	E-3	E-4	E-5	E-6	E-7	E-8	E-9
0-1	14.3	17.4	3.7	48.1	9.6	13.8	26.9	23.7	35.0
2-3	61.9	65.2	85.2	51.9	49.1	53.8	38.1	50.0	45.0
4-6	19.0	13.0	7.4	—	25.4	21.5	23.9	18.4	17.5
7-10	—	4.3	3.7	—	10.5	9.2	5.2	2.6	2.5
11-15	4.8	—	—	—	3.5	1.5	2.2	—	—
16+	—	—	—	—	1.8	—	3.7	5.3	—

CATEGORY F: GUIDANCE

HOURS	F-1	F-2	F-3	F-4	F-5
0-1	12.7	14.8	21.4	5.7	5.9
2-3	41.8	37.0	47.6	47.2	41.2
4-6	25.3	22.2	19.0	34.0	41.2
7-10	12.7	18.5	7.1	13.2	8.8
11-15	3.8	3.7	4.8	—	2.9
16+	3.8	3.7	—	—	—

CATEGORY G: SCHOOL-COMMUNITY RELATIONS

HOURS	G-1	G-2	G-3	G-4	G-5	G-6	G-7	G-8	G-9	G-10
0-1	9.1	—	16.7	10.5	11.8	—	—	4.5	16.7	5.0
2-3	22.7	56.3	30.0	36.8	35.3	30.8	45.5	18.2	75.0	40.0
4-6	27.3	31.3	16.7	10.5	23.5	46.2	31.8	40.9	8.3	50.0
7-10	27.3	12.5	16.7	—	8.8	23.1	13.6	22.7	—	5.0
11-15	4.5	—	—	31.6	8.8	—	4.5	9.1	—	—
16+	9.1	—	20.0	10.5	11.8	—	4.5	4.5	—	—

CATEGORY H: STUDENT VOCATIONAL ORGANIZATION

HOURS	H-1	H-2	H-3	H-4	H-5
0-1	9.5	28.0	25.8	32.3	8.3
2-3	45.2	36.0	45.2	38.7	16.7
4-6	23.8	12.0	3.2	6.5	25.0
7-10	21.4	12.0	19.4	6.5	41.7
11-15	—	8.0	6.5	16.1	8.3
16+	—	4.0	—	—	—

CATEGORY I: PROFESSIONAL ROLE AND DEVELOPMENT

HOURS	I-1	I-2	I-3	I-4	I-5	I-6	I-7	I-8
0-1	11.1	32.1	4.8	21.1	13.8	8.8	18.9	18.5
2-3	43.2	57.1	21.0	42.1	44.8	36.8	34.0	51.9
4-6	34.6	7.1	36.2	21.1	27.6	26.3	26.4	16.7
7-10	3.7	3.6	23.8	5.3	13.8	14.0	18.9	11.1
11-15	1.2	—	5.7	10.5	—	3.5	—	1.9
16+	6.2	—	8.6	—	—	10.5	1.9	—

CATEGORY J: COORDINATION OF COOPERATIVE EDUCATION

HOURS	J–1	J–2	J–3	J–4	J–5	J–6	J–7	J–8	J–9	J–10
0–1	6.5	8.5	3.2	9.1	12.7	10.6	11.6	23.3	9.4	27.8
2–3	58.7	57.4	32.3	40.9	42.9	61.7	39.5	56.7	71.9	63.9
4–6	23.9	21.3	41.9	31.8	19.0	21.3	37.2	16.7	18.8	5.6
7–10	8.7	10.6	12.9	11.4	12.7	6.4	9.3	3.3	—	2.8
11–15	2.2	—	3.2	2.3	6.3	—	2.3	—	—	—
16+	—	2.1	6.5	4.5	6.3	—	—	—	—	—

Appendix E

LIST OF REQUIRED, OPTIONAL, AND ALTERNATE RESOURCES NEEDED FOR THE CENTER'S PBTE MODULES

The attached listing of required, optional, and alternate resources identifies the outside (external to modules) resources that are needed or suggested for use with The Center's PBTE curricula materials. We have **not** listed **audiovisual equipment** such as videotape or slide/tape equipment. We also have **not** listed resources such as persons, organizations, or situations for which you will need to make arrangements. We have listed all **major** required and optional books, articles, samples, media, and materials you will need to locate or purchase.

Please do **not** order any of the commercially available materials from The Center; it will only serve to delay getting your request filled as we will either have to return the order to you or forward it on to the actual supplier. A list of the names and addresses of the 59 different sources of these materials is provided by means of a code number at the end of the listing, pp. 101–102.

Using the Resource List

On pp. 91–100, you will find listed, by module number, the resources needed, together with their estimated individual cost, the sources from which the materials can be acquired, and an indication of whether each resource is part of a required, optional, or alternate activity. You need to keep several things in mind as you work with this list:

- The **prices** quoted represent the most current information available at the time of this writing. They **are subject to change.**
- Make sure that you **order each item from the source indicated by the code number** in the Source column. Do not go by the information provided within the citation as provided in the Resources Needed column; in many cases, the original source listed in the citation is no longer correct.
- In cases in which the **source is no longer available** (out of print, etc.), no source or estimated cost has been provided. However, these materials are, in most cases, generally still readily available locally through libraries and resource centers.
- In ordering materials from source number 12, CVE Publications, be sure to order by the **series number** given at the end of each citation.
- The Estimated Cost column contains a further coding—①②③④—to indicate special directions concerning ordering procedures for a particular resource, as follows:

① These materials were produced originally by The Center, but are being distributed by the publisher, AAVIM. Prices will be available on request from the publisher.

② These materials are journals and periodicals which should be readily available in your local library or resource center. If not, you can contact the source indicated for information about availability and costs of reprints.

③ If you wish to purchase large quantities of these materials, they must be purchased through US-GPO; however, limited copies of these publications are available free of charge from any OSHA office. Offices are listed in the telephone directory under U.S. Department of Labor in the U.S. Government listing.

④ Inquiries about the Fair Labor Standards Act will be answered by mail, telephone, or personal interview at any office of the Wage and Hour Division of the U.S. Department of Labor. Offices are listed in the telephone directory under U.S. Department of Labor in the U.S. Government listing. These offices also supply publications free of charge.

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
A–1				None
A–2				None
A–3	Optional	27	$10.50	Young, Robert K. and Donald J. Veldman. *Introductory Statistics for the Behavioral Sciences*. Second Edition. New York, NY: Holt, Rinehart & Winston, Inc., 1972.
	Optional	44	11.95	Freund, John E. *Modern Elementary Statistics*. Fourth Edition. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1973.
	Optional	52	2.75	Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. Fourth Edition. Chicago, IL: University of Chicago Press, 1973.
A–4	Optional	–	–	Burt, Samuel M. *Industry and Vocational-Technical Education*. New York, NY: McGraw-Hill Book Co., 1967. (Out of print)
	Optional	6	1.25	American Vocational Association. *The Advisory Committee and Vocational Education*. Washington, DC: AVA, Inc., 1969.
	Optional	32	2.95	Riendeau, Albert J. *Advisory Committees for Occupational Education: A Guide to Organization and Operation*. New York, NY: McGraw-Hill Book Co., 1977.
A–5	Optional	6	1.25	American Vocational Association. *The Advisory Committee and Vocational Education*. Washington, DC: AVA, Inc., 1969.
	Optional	32	2.95	Riendeau, Albert J. *Advisory Committees for Occupational Education: A Guide to Organization and Operation*. New York, NY: McGraw-Hill Book Co., 1977.
A–6				None
A–7	Optional	8	7.95	Fryklund, Verne C. *Occupational Analysis: Techniques and Procedures*. New York, NY: Bruce Publishing Company, 1970.
	Optional	12	3.25	Ammerman, H. L. and F. C. Pratzner. *Performance Content for Job Training. Volume 1: Introduction*. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1977. (Series No.: RD 121)
	Optional	12	5.10	Ammerman, H. L. *Performance Content for Job Training. Volume 2: Stating the Tasks of the Job*. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1977. (Series No.: RD 122)
	Optional	49	12.80 (I) 11.10 (II)	U.S. Department of Labor, Bureau of Employment Security. *Dictionary of Occupational Titles*, Volumes I and II, 1965. (NOTE: Updated editions of the DOT are published periodically.)
	Optional	49	7.00	U.S. Department of Labor, Bureau of Labor Statistics. *Occupational Outlook Handbook*, Current Edition.
	Optional	15	12.95 each	Arnold, Walter M. *et al.* (Eds.). *Career Opportunities for Technicians and Specialists*. Volumes I–V. New York, NY: Doubleday & Company, Inc., 1969–70.
	Optional	15	7.95	Norton, Joseph L. (Ed.). *On the Job*. New York, NY: Doubleday & Company, Inc., 1971.
	Optional	12	6.25	Ammerman, H. L. *Performance Content for Job Training. Volume 3: Identifying Relevant Job Performance*. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1977. (Series No.: RD 123)
	Optional	12	5.50	Ammerman, H. L. and D. W. Essex. *Performance Content for Job Training. Volume 4: Deriving Performance Requirements for Training*. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1977. (Series No.: RD 124)
A–8				None
A–9	Optional	3 20	3.00 .25 MF 1.25 HC	Henderson, John T. *Program Planning with Surveys in Occupational Education*. Washington, DC: American Association of Junior Colleges, 1970. ED 045 087
A–10	Optional	12	4.50	Paul, Krishan K. *A Manual for Conducting Follow-up Surveys of Former Vocational Students*. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1975. (Series No.: RD 106)

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	20	$ .78 MF 8.24 HC plus postage	Orlich, Donald C. *et al. Guide to Sensible Surveys*. Olympia, WA: Research Coordinating Unit, Washington State Commission for Vocational Education, 1975. ED 112 017
	Optional	58	7.95	Babbie, Earl R. *Survey Research Methods: A Cookbook and Other Fables*. Belmont, CA: Wadsworth Publishing Co., Inc., 1972.
	Optional	35	3.75	Strunk, William, Jr. and E. B. White. *The Elements of Style*. Second Edition. New York, NY: Macmillan Publishing Co., Inc., 1972.
	Optional	52	2.75	Turabian, Kate L. *A Manual for Writers of Term Papers, Theses, and Dissertations*. Fourth Edition. Chicago, IL: University of Chicago Press, 1973.
A–11	Optional	12	2.25	Denton, William T. *Program Evaluation in Vocational and Technical Education*. Columbus, OH: The Center for Vocational Education, The Ohio State University, 1973. (Series No.: IN 96)
	Optional	31	3.00	Byram, Harold M. and Marvin Robertson (Comps.). *Locally Directed Evaluation of Local Vocational Education Programs*. Third Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1971. ED 067 479
	Optional	2	11.95	Wentling, Tim L. and Tom E. Lawson. *Evaluating Occupational Education and Training Programs*. Boston, MA: Allyn & Bacon, Inc., 1975.
B–1	Optional	52	2.45	Tyler, Ralph W. *Basic Principles of Curriculum and Instruction*. Chicago, IL: University of Chicago Press, 1969.
	Optional	34	12.75	Silvius, G. Harold and Estell H. Curry. *Teaching Successfully in Industrial Education*. Bloomington, IL: McKnight & McKnight Publishing Company, 1967.
B–2	Optional	21	2.25	Mager, Robert F. *Preparing Instructional Objectives*. Belmont, CA: Fearon Publishers, Inc., 1962.
	Optional	16	2.95	Armstrong, Robert J. *et al. Developing and Writing Behavioral Objectives*. Tucson, AZ: Educational Innovators Press, 1970.
	Optional	33	3.50	Bloom, Benjamin S. (Ed.). *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain*. New York, NY: David McKay Co., Inc., 1956.
	Optional	33	3.50	Krathwohl, David R., Benjamin S. Bloom, and Bertram B. Masia. *Taxonomy of Educational Objectives, Handbook II: Affective Domain*. New York, NY: David McKay Co., Inc., 1964.
B–3	Optional	24	12.95	Taba, Hilda. *Curriculum Development: Theory and Practice*. New York, NY: Harcourt, Brace & World, Inc., 1962.
	Optional	56	20.00	Filmstrip and audiotape, "Teaching Units and Lesson Plans," VIMCET filmstrip and audiotape #13, VIMCET Associates, Los Angeles, California, 1966.
	Optional	21	2.50	Mager, Robert F. and Kenneth M. Beach, Jr. *Developing Vocational Instruction*. Belmont, CA: Fearon Publishers, Inc., 1967.
B–4				None
B–5	Required	37	2.95	Smith, Hayden R. and Thomas S. Nagel. *Instructional Media in the Learning Process*. Columbus, OH: Charles E. Merrill Publishing Co., 1972.
B–6				None
C–1	Optional	4	①	Slide/tape, "Field Trips—The Use of Community Resources," The Center for Vocational Education, The Ohio State University, Columbus, Ohio.
C–2				None
C–3	Optional	44	6.95	Johnson, David W. and Frank P. Johnson. *Joining Together: Group Theory and Group Skills*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1975.
C–4				None

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
C–5	Optional	39	②	Hanson, Garth A. and E. Charles Parker. "Simulated Work Experiences for Prospective Business Teachers." *National Business Education Quarterly.* 38 (December 1969): 25–33.
	Optional	6	②	McClelland, William A. "Simulation—Can It Benefit Vocational Education?" *American Vocational Journal.* 45 (September 1970): 23–25.
	Optional	6	②	Persons, Edgar. "It's an Old Game in Vocational Agriculture." *American Vocational Journal.* 45 (September 1970): 34–36.
	Optional	6	②	Resnick, Harold S. "Simulating the Corporate Structure: A Learning Game for Industrial Education." *American Vocational Journal.* 45 (September 1970): 37–39.
	Optional	28	②	*Illinois Teacher.* 15 (September/October 1971).
	Optional	35	$ 9.95	Clark, Leonard H. and Irving S. Starr. *Secondary School Teaching Methods.* Second Edition. New York, NY: Macmillan Publishing Co., Inc., 1967.
	Optional	2	12.50	Hoover, Kenneth H. *Learning and Teaching in the Secondary School.* Boston, MA: Allyn & Bacon, Inc., 1972.
	Optional	50	7.00	Maier, Norman R. F., Allen R. Solem, and Ayesha A. Maier. *The Role-Play Technique: A Handbook for Management and Leadership Practice.* La Jolla, CA: University Associates, Inc., 1975.
C–6	Optional	25	6.95	Robinson, Francis P. *Effective Study.* Fourth Edition. New York, NY: Harper & Row, Publishers, Inc., 1970.
	Optional	38	6.50	Charles, Carol. *Education Psychology: The Instructional Endeavor.* St. Louis, MO: The C. V. Mosby Co., Inc., 1972.
C–7	Optional	5	7.25	Giachino, J. W. and Ralph O. Gallington. *Course Construction in Industrial Arts, Vocational and Technical Education.* Third Edition. Chicago, IL: American Technical Society, 1967.
C–8				None
C–9				None
C–10				None
C–11				None
C–12	Optional	25	5.50 (1966)	Sanders, Norris M. *Classroom Questions—What Kinds?* New York, NY: Atherton Press, 1964. (Now published by Harper & Row, Publishers, Inc., 1966)
C–13	Optional	1	7.95	Allen, Dwight and Kevin Ryan. *Microteaching.* Reading, MA: Addison-Wesley Publishing Co., Inc., 1969.
	Alternate	48	110.00	Film, "Increasing Student Participation—I: Reinforcement," Silver-Burdett Company, Morristown, New Jersey.
C–14	Optional	–	–	Weaver, Frank B. *Helping Slow Learners and Undereducated Adults.* Brentwood, MD: Class National Publishing, 1971. (Out of print)
C–15	Optional	44	5.50	Popham, James W. and Eva L. Baker. *Systematic Instruction.* Englewood Cliffs, NJ: Prentice-Hall, Inc., 1970.
C–16	Optional	18	25.00	Videotape, "Demonstration," Educational Television Service, Stillwater, Oklahoma.
C–17	Optional	–	–	Woodruff, Asahel D. *Basic Concepts of Teaching.* San Francisco, CA: Chandler Publishing Co., 1961.
C–18	Optional	20	.65 MF 3.29 HC	Bjorkquist, David. "What Vocational Education Teachers Should Know About Individualizing Instruction." Columbus, OH: The Center for Vocational Education, The Ohio State University, ERIC Clearinghouse on Vocational and Technical Education, 1971. ED 057 184
	Optional	10	②	Weaver, David H. "Individualizing Instruction: A Return to the One-Room Schoolhouse?" *Business Education World.* 55 (November/December 1974): 5–7.

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	44	$ 9.95	Lewis, James, Jr., *Administering the Individualized Instruction Program.* New York, NY: Parker Publishing Co., 1971. (Now available from Prentice-Hall)
	Optional	17	9.95	Kapfer, Philip G. and Glen F. Ovard. *Preparing and Using Individualized Learning Packages for Ungraded, Continuous Progress Education.* Englewood Cliffs, NJ: Educational Technology Publications, Inc., 1971.
C–19	Optional	29	7.95	Beggs, David W., III (Ed.). *Team Teaching: Bold New Venture.* Bloomington, IN: Indiana University Press, 1964.
	Optional	37	2.95	Chamberlin, Leslie J. *Team Teaching: Organization and Administration.* Columbus, OH: Charles E. Merrill Publishing Co., 1969.
	Optional	2	12.50 (1973 ed.)	Trump, J. Lloyd and Delmas F. Miller. *Secondary School Curriculum Improvement: Proposals and Procedures.* Boston, MA: Allyn & Bacon, Inc., 1968. (New edition: *Secondary Procedures: Challenges, Humanism, Accountability*, 1973)
C–20	Optional	4	①	Videotape, "Utilize a Subject Matter Expert," The Center for Vocational Education, The Ohio State University, Columbus, Ohio.
C–21	Optional	25	15.95	Wittich, Walter A. and Charles F. Schuller. *Instructional Technology: Its Nature and Use.* Fifth Edition. New York, NY: Harper & Row, Publishers, Inc., 1973.
	Optional	54	2.50	Lockridge, J. Preston. *Educational Displays and Exhibits.* Austin, TX: The University of Texas, Division of Extension, 1966.
C–22	Optional	–	–	Dale, Edgar. *Audiovisual Materials in Teaching.* Third Edition. Hinsdale, IL: The Dryden Press, Inc., 1969. (Out of print)
C–23				None
C–24				None
C–25				None
C–26				None
C–27	Optional	4	①	Videotape, "Operating Videotape Equipment," The Center for Vocational Education, The Ohio State University, Columbus, Ohio.
	Optional	4	①	Videotape, "Present Information with T.V.," The Center for Vocational Education, The Ohio State University, Columbus, Ohio.
C–28	Optional	20	.25 MF 2.32 HC	Norton, Robert E. *Using Programed Instruction in Occupational Education.* Albany, NY: Bureau of Occupational Education Research, The State Education Department, The University of New York, 1967. ED 018 660
C–29	Optional	–	–	Filmstrips, "Chalkboards, Parts I and II," in the Filmstrip Series, *Teaching with Visual Materials*, McGraw-Hill Book Co., New York, New York, 1964. (No longer available)
	Optional	34	12.75	Silvius, G. Harold and Estell H. Curry. *Teaching Successfully in Industrial Education.* Second Edition. Bloomington, IL: McKnight & McKnight Publishing Company, 1967.
	Optional	25	15.95	Wittich, Walter A. and Charles F. Schuller. *Instructional Technology: Its Nature and Use.* Fifth Edition. New York, NY: Harper & Row, Publishers, Inc., 1973.
D–1				None
D–2	Required	25	3.95	Green, John A. *Teacher-Made Tests.* Second Edition. New York, NY: Harper & Row, Publishers, Inc., 1975.
	Optional	19	1.00	*Making the Classroom Test: A Guide for Teachers.* Princeton, NJ: Educational Testing Service, 1969.
	Optional	–	–	Filmstrip and accompanying record or tape, "Planning," Part I of the filmstrip series, *Making Your Own Tests*, Educational Testing Service, Cooperative Test Division, Princeton, New Jersey, n.d. (No longer available)

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	–	–	Filmstrip and accompanying record or tape, "Construction," Part II of the filmstrip series, *Making Your Own Tests*, Educational Testing Service, Cooperative Test Division, Princeton, New Jersey, n.d. (No longer available)
	Optional	32	$ 11.95	Micheels, William J. and M. Ray Karnes. *Measuring Educational Achievement*. New York, NY: McGraw-Hill Book Co., 1950.
	Optional	19	1.00	*Multiple-Choice Questions: A Close Look*. Princeton, NJ: Educational Testing Service, 1963.
	Optional	33	3.50	Bloom, Benjamin S. (Ed.). *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain*. New York, NY: David McKay Co., Inc., 1956.
D–3	Required	33	3.50	Krathwohl, David R., Benjamin S. Bloom, and Bertram B. Masia. *Taxonomy of Educational Objectives, Handbook II: Affective Domain*. New York, NY: David McKay Co., Inc., 1964.
	Optional	41	2.00	Eiss, Albert F. and Mary Blatt Harbeck. *Behavioral Objectives in the Affective Domain*. Washington, DC: National Science Supervisors Assoc., 1969.
	Optional	32	14.50	Bloom, Benjamin S., J. Thomas Hastings, and George F. Madeus. *Handbook on Formative and Summative Evaluation of Student Learning*. St. Louis, MO: McGraw-Hill Book Co., 1971.
	Optional	21	2.75	Mager, Robert F. *Developing Attitude Toward Learning*. Belmont, CA: Fearon Publishers, Inc., 1968.
	Optional	51	3.75	Indiana Home Economics Association. *Evaluation in Home Economics*. West Lafayette, IN: IHEA, 1964. (Revised 1974)
D–4	Optional	14	3.90	Leighbody, G. B. and D. M. Kidd. *Methods of Teaching Shop and Technical Subjects*. New York, NY: Delmar Publishers, 1966.
	Optional	19	4.00	Boyd, Joseph L., Jr. and Benjamin Shimberg. *Handbook of Performance Testing*. Princeton, NJ: Educational Testing Service, 1971.
	Optional	44	7.95 3.95 (paper)	Popham, W. James. *Evaluating Instruction*. Englewood Cliffs, NJ: Prentice-Hall, Inc., 1973.
D–5	Optional	26	7.50 2.95 (paper)	Kirschenbaum, Howard *et al. Wad-Ja-Get? The Grading Game in American Education*. New York, NY: Hart Publishing Co., 1971.
D–6				None
E–1	Optional	34	12.75	Silvius, G. Harold and Ralph C. Bohn. *Organizing Course Materials for Industrial Education*. Bloomington, IL: McKnight & McKnight Publishing Company, 1961.
E–2				None
E–3				None
E–4	Optional	49	12.80 (I) 11.10 (II)	U.S. Department of Labor, Bureau of Employment Security. *Dictionary of Occupational Titles*. Volumes I and II, 1965. (NOTE: Updated editions of the DOT are published periodically.)
	Optional	–	–	U.S. Office of Education. *Vocational Education and Occupations*. Washington, DC: U.S. Government Printing Office, 1969. (Out of print)
	Optional	6	4.00	Miller, Howard and Ralph J. Woodin. *Agdex: A System for Classifying, Indexing, and Filing Agriculture Publications*. Revised Edition. Washington, DC: American Vocational Association, Inc., 1969.
	Optional	57	5.25	South Carolina Department of Education. *Filing: Distributive Education*. Clemson, SC: Clemson University, Vocational Education Media Center, 1970.
E–5	Required	49	③ 5.35 (Pt. 1910) 3.00 (Pt. 1926)	*Occupational Safety and Health Standards*, Code of Federal Regulations, Title 29, Part 1910, General Industry Standards; and Part 1926, Construction. Washington, DC: Occupational Safety and Health Administration, Latest Edition.

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	42	Free	Wahl, Ray. *A Safety and Health Guide for Vocational Educators: An Instructional Guide with Emphasis on Cooperative Education and Work-Study Programs.* Harrisburg, PA: Pennsylvania Department of Education, Bureau of Vocational Education, 1977.
	Optional	23	$ 6.96	Baird, Ronald J. *Contemporary Industrial Teaching.* South Holland, IL: Goodheart-Willcox, Co., Inc., 1972.
	Optional	43	6.50 4.50 (paper)	Kigin, Denis J. *Teacher Liability in School-Shop Accidents.* Ann Arbor, MI: Prakken Publications, Inc., 1973.
	Optional	32	2.08	Detroit Public Schools. *Keys to Safety in Homemaking.* St. Louis, MO: McGraw-Hill Book Company, Webster Division, 1966.
	Optional	30	Free	*Industrial Arts and Vocational Education Safety Manual.* Columbus, OH: Industrial Commission of Ohio, Division of Safety and Hygiene, n.d.
E–6	Required	15	3.50 1.95 (paper)	The American National Red Cross. *Standard First Aid and Personal Safety.* Garden City, NY: Doubleday and Company, Inc., 1973.
E–7	Optional	21	2.25	Gray, Jenny. *The Teacher's Survival Guide.* Belmont, CA: Fearon Publishers, Inc., 1974.
	Optional	21	2.75	Mager, Robert and Peter Pipe. *Analyzing Performance Problems: or, You Really Oughta Wanna.* Belmont, CA: Fearon Publishers, Inc., 1970.
	Optional	2	13.95 5.50 (paper)	Madsen, Charles H., Jr. and Clifford K. Madsen. *Teaching Discipline: A Positive Approach for Educational Development.* Boston, MA: Allyn & Bacon, Inc., 1970.
	Optional	46	3.60	Buckley, Nancy K. and Hill M. Walker. *Modifying Classroom Behavior: A Manual of Procedure for Classroom Teachers.* Champaign, IL: Research Press Company, 1970.
E–8	Required	49	③ 5.35 (Pt. 1910) 3.00 (Pt. 1926)	*Occupational Safety and Health Standards,* Code of Federal Regulations, Title 29, Part 1910, General Industry Standards; and Part 1926, Construction. Washington, DC: Occupational Safety and Health Administration, Latest Edition.
	Optional	42	Free	Wahl, Ray. *A Safety and Health Guide for Vocational Educators: An Instructional Guide with Emphasis on Cooperative Education and Work-Study Programs.* Harrisburg, PA: Pennsylvania Department of Education, Bureau of Vocational Education, 1977.
	Optional	58	9.95	Storm, George. *Managing the Occupational Education Laboratory.* Belmont, CA: Wadsworth Publishing Co., Inc., 1976.
	Optional	4	①	Slide/tape, "Organizing and Maintaining the Vocational Laboratory," The Center for Vocational Education, The Ohio State University, Columbus, Ohio.
E–9	Optional	34	12.75	Silvius, G. Harold and Estell H. Curry. *Managing Multiple Activities in Industrial Education.* Bloomington, IL: McKnight & McKnight Publishing Company, 1971.
	Optional	58	9.95	Storm, George. *Managing the Occupational Education Laboratory.* Belmont, CA: Wadsworth Publishing Co., Inc., 1976.
F–1				None
F–2				None
F–3				None
F–4	Optional	32	12.95	Hoppock, Robert. *Occupational Information: Where to Get It and How to Use It in Counseling and in Teaching.* Fourth Edition. New York, NY: McGraw-Hill Book Co., 1977.
F–5				None
G–1	Optional	22	8.95	Bortner, Doyle M. *Public Relations for Public Schools.* Cambridge, MA: Schenkman Publishing Company, 1972. (Distributed by General Learning Press)

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	11	$ 8.95 (+ 1.50 for processing)	Bagin, Donald, Frank Grazian, and Charles H. Harrison. *School Communications Ideas that Work: A Public Relations Handbook for School Officials.* Chicago, IL: Nation's Schools Press, McGraw-Hill Publications Company, 1972. (Now published by Capital Publishers)
	Optional	45	2.75 (1977)	*Public Relations Guide.* Cincinnati, OH: The Procter & Gamble Company, Educational Services, 1975. (Revised 1977)
	Optional	31	4.95	American Association of Agricultural College Editors. *Communications Handbook.* Third Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1976.
G–2	Optional	31	4.95	American Association of Agricultural College Editors. *Communications Handbook.* Third Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1976.
G–3	Optional	45	2.75 (1977)	*Public Relations Guide.* Cincinnati, OH: The Procter & Gamble Company, Educational Services, 1975. (Revised 1977)
	Optional	31	4.95	American Association of Agricultural College Editors. *Communications Handbook.* Third Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1976.
G–4				None
G–5	Optional	31	4.95	American Association of Agricultural College Editors. *Communications Handbook.* Third Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1976.
	Optional	45	2.75 (1977)	*Public Relations Guide.* Cincinnati, OH: The Procter & Gamble Company, Educational Services, 1975. (Revised 1977)
	Optional	35	3.75	Strunk, William, Jr., and E. B. White. *The Elements of Style.* Second Edition. New York, NY: MacMillan Publishing Co., Inc., 1972.
	Required	7	2.95	*The Associated Press Stylebook.* New York, NY: Associated Press, 1977.
	Optional	6	②	Outcalt, Richard M. "The Pros Versus the Rookies." *American Vocational Journal.* 49 (December 1974): 45–47.
G–6	Optional	11	8.95 (+ 1.50 for processing)	Bagin, Donald, Frank Grazian, and Charles H. Harrison. *School Communications Ideas that Work: A Public Relations Handbook for School Officials.* Chicago, IL: Nation's Schools Press, McGraw-Hill Publications Company, 1972. (Now published by Capital Publishers)
	Optional	31	4.95	American Association of Agricultural College Editors. *Communications Handbook.* Third Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1976.
G–7				None
G–8				None
G–9				None
G–10				None
H–1 to H–6	Required	59	–	Official handbooks of the various student vocational organizations.
I–1				None
I–2				None
I–3	Optional	32	9.95	Marland, Sidney P., Jr. *Career Education: Proposal for Reform.* New York, NY: McGraw-Hill Book Co., 1975.
	Optional	6	10.00	Strong, Merle E. (Ed.). *Developing the Nation's Work Force, Yearbook 5.* Washington, DC: American Vocational Association, Inc., 1975.
	Optional	6	8.50	Law, Gordon F. (Ed.). *Contemporary Concepts in Vocational Education, First Yearbook of the American Vocational Association.* Washington, DC: American Vocational Association, Inc., 1971.

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	6	$ 10.00	Barlow, Melvin (Ed.) *The Philosophy for Quality Vocational Education Programs, Fourth Yearbook of the American Vocational Association.* Washington, DC: American Vocational Association, Inc., 1974.
I–4				None
I–5	Optional	36	1.00	Johannson, Francis Faust (Ed.). *Consumer Survival Kit: Buddy, Can You Spare a Job?* Owings Mills, MD: Maryland Center for Public Broadcasting, 1975.
	Required	40	6.50	Stinnett, T. M. and National Education Association. *A Manual on Standards Affecting School Personnel in the United States.* Washington, DC: NEA, 1974.
I–6	Optional	47	4.95	Johnson, James A. and Roger A. Anderson. *Secondary Student Teaching: Readings.* Glenview, IL: Scott, Foresman and Company, 1971.
I–7	Required	4	4.80	Fardig, Glen E., Robert E. Norton, and James B. Hamilton. *Guide to the Implementation of Performance-Based Teacher Education.* Athens, GA: American Association for Vocational Instructional Materials, 1977.
	Required	4	4.80	Hamilton, James B. and Karen M. Quinn. *Resource Person Guide to Using Performance-Based Teacher Education Materials.* Athens, GA: American Association for Vocational Instructional Materials, 1977.
	Optional	47	4.95	Johnson, James A. and Roger A. Anderson. *Secondary Student Teaching: Readings.* Glenview, IL: Scott, Foresman and Company, 1971.
I–8	Optional	47	4.95	Johnson, James A. and Roger A. Anderson. *Secondary Student Teaching: Readings.* Glenview, IL: Scott, Foresman and Company, 1971.
	Optional	–	–	Association of Teacher Educators. *Supervisory Conference as Individualized Teaching.* Bulletin No. 28. Washington, DC: ATE, 1969. (Out of print)
	Required	4	4.80	Hamilton, James B. and Karen M. Quinn. *Resource Person Guide to Using Performance-Based Teacher Education Materials.* Athens, GA: American Association for Vocational Instructional Materials, 1977.
J–1	Optional	53	2.00	*A Guide for Cooperative Vocational Education.* Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum.* Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education.* Columbus, OH: Charles E. Merrill Publishing Co., 1975.
	Required	49	Free ④	U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division. *Child Labor Requirements in Agriculture under the Fair Labor Standards Act.* Child Labor Bulletin No. 102. Washington, DC: U.S. Government Printing Office, 1976.
	Required	49	Free ④	U.S. Department of Labor, Employment Standards Administration, Wage and Hour Division. *Child Labor Requirements in Nonagricultural Occupations under the Fair Labor Standards Act.* Child Labor Bulletin No. 101. Washington, DC: U.S. Government Printing Office, 1976.
	Optional	9	②	Bullard, W. Lee. "The Student Selection Myth in Cooperative Education." *Business Education Forum.* 26 (January 1972): 7–9.
J–2	Optional	53	2.00	*A Guide for Cooperative Vocational Education.* Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	31	$ 8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum*. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.
J–3	Required	55	58.00	Slide/tape presentation, Uthe, Elaine F., "Forms for Recruitment and Selection," part I–D of *The Cooperative Vocational Program: Coordination Techniques* developed at the Michigan State University, 1972.
	Optional	13	41.50	Videotape, Richardson, Donald and Charles Beall, "Student Screening," from the series *Coordinating Techniques*, Colorado State Board for Community Colleges and Occupational Education, Colorado State University, Department of Vocational Education, Fort Collins, Colorado, 1976.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum*. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.
	Optional	53	2.00	*A Guide for Cooperative Vocational Education*. Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Required	55	5.00	Cassette tape, Uthe, Elaine F., "Mary Lou at Recruitment Time," part I–H of *The Cooperative Vocational Program: Coordination Techniques* developed at the Michigan State University, 1972.
	Required	55	5.00	Cassette tape, Uthe, Elaine F., "Betty at Recruitment Time," part I–I of *The Cooperative Vocational Program: Coordination Techniques* developed at the Michigan State University, 1972.
	Required	55	5.00	Cassette tape, Uthe, Elaine F., "Wayne at Recruitment Time," part I–J of *The Cooperative Vocational Program: Coordination Techniques* developed at the Michigan State University, 1972.
J–4	Optional	53	2.00	*A Guide for Cooperative Vocational Education*. Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum*. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.
	Optional	13	47.50	Videotape, Richardson, Donald and Charles Beall, "Training Station Development," from the series *Coordinating Techniques*, Colorado State Board for Community Colleges and Occupational Education, Colorado State University, Department of Vocational Education, Fort Collins, Colorado, 1976.
J–5	Optional	53	2.00	*A Guide for Cooperative Vocational Education*. Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum*. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.

Module	Alternate/ Required/ Optional	Source	Estimated Cost	Resources Needed
	Optional	13	$ 59.00 46.00	Videotapes, Richardson, Donald and Charles Beall, "Training Plans," and "Placing Students," from the series *Coordinating Techniques*, Colorado State Board for Community Colleges and Occupational Education, Colorado State University, Department of Vocational Education, Fort Collins, Colorado, 1976.
J–5	Optional	42	Free	Wahl, Ray. *A Safety and Health Guide for Vocational Educators: An Instructional Guide with Emphasis on Cooperative Education and Work-Study Programs*. Harrisburg, PA: Pennsylvania Department of Education, Bureau of Vocational Education, 1977.
J–6	Optional	13	44.50	Videotape, Richardson, Donald and Charles Beall, "Sponsor Development," from the series *Coordinating Techniques*, Colorado State Board for Community Colleges and Occupational Education, Colorado State University, Department of Vocational Education, Fort Collins, Colorado, 1976.
	Optional	53	2.00	*A Guide for Cooperative Vocational Education*. Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum*. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.
J–7	Optional	53	2.00	*A Guide for Cooperative Vocational Education*. Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum*. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.
	Required	55	5.00	Cassette tape, Uthe, Elaine F., "Wayne in a Job Situation," part II–E of *The Cooperative Vocational Program: Instructional Planning* developed at the Michigan State University, 1972. (Required only if you choose not to read printed case study.)
J–8	Optional	53	2.00	*A Guide for Cooperative Vocational Education*. Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. *Cooperative Occupational Education and Work Experience in the Curriculum*. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.
	Optional	13	55.00	Videotape, Richardson, Donald and Charles Beall, "Visitations," from the series *Coordinating Techniques*, Colorado State Board for Community Colleges and Occupational Education, Colorado State University, Department of Vocational Education, Fort Collins, Colorado, 1976.
J–9	Optional	53	2.00	*A Guide for Cooperative Vocational Education*. Minneapolis, MN: University of Minnesota, College of Education, Division of Vocational and Technical Education, 1969.
	Optional	31	8.95	Mason, Ralph E. and Peter G. Haines. Cooperative Occupational Education and Work Experience in the Curriculum. Second Edition. Danville, IL: The Interstate Printers & Publishers, Inc., 1972.
	Optional	37	11.95	Meyer, Warren G., Lucy C. Crawford, and Mary K. Klaurens. *Coordination in Cooperative Vocational Education*. Columbus, OH: Charles E. Merrill Publishing Co., 1975.
J–10				None

1. Addison-Wesley Publishing Co., Inc.
Jacob Way
Reading, MA 01867

2. Allyn & Bacon, Inc.
470 Atlantic Avenue
Boston, MA 02210

3. American Association of Community and Junior Colleges
One Dupont Circle, Suite 410
Washington, DC 20036

4. American Association for Vocational Instructional Materials (AAVIM)
120 Engineering Center
University of Georgia
Athens, GA 30602

5. American Technical Society
5608 Stony Island Avenue
Chicago, IL 60637

6. American Vocational Association, Inc.
1510 "H" Street, N.W.
Washington, DC 20005

7. Associated Press
50 Rockefeller Plaza
New York, NY 10020

8. Bruce Books
866 Third Avenue
New York, NY 10022

9. Business Education Forum
National Business Education Association
1906 Association Drive
Reston, VA 22091

10. Business Education World
McGraw-Hill Book Co.
1221 Avenue of the Americas
New York, NY 10020

11. Capital Publishers, Inc.
P.O. Box 6235
Washington, DC 20015

12. CVE Publications
The Center for Vocational Education
The Ohio State University
1960 Kenny Road
Columbus, OH 43210

13. Colorado State Board for Community College and Occupational Education
Department of Vocational Education
Colorado State University
Fort Collins, CO 80521

14. Delmar Publishers
50 Wolf Road
Albany, NY 12205

15. Doubleday & Company, Inc.
245 Park Avenue
New York, NY 10017

16. Educational Innovators Press
P.O. Box 13052
Tucson, AZ 85702

17. Educational Technology Publications, Inc.
140 Sylvan Avenue
Englewood Cliffs, NJ 07632

18. Educational Television Service
Oklahoma State University
Stillwater, OK 74074

19. Educational Testing Service
Rosedale Road
Princeton, NJ 08540

20. ERIC Document Reproduction Services
P.O. Box 190
Arlington VA 22210

21. Fearon Publishers, Inc.
6 Davis Drive
Belmont, CA 94002

22. General Learning Press
A Division of Silver-Burdett Company
250 James Street
Morristown, NJ 07960

23. Goodheart-Willcox Co., Inc.
123 West Taft Drive
South Holland, IL 60473

24. Harcourt Brace Jovanovich, Inc.
757 Third Avenue
New York, NY 10017

25. Harper & Row, Publishers, Inc.
10 East 53d Street
New York, NY 10022

26. Hart Publishing Co.
15 West Fourth Street
New York, NY 10012

27. Holt, Rinehart & Winston, Inc.
383 Madison Avenue
New York, NY 10017

28. Illinois Teacher of Home Economics
University of Illinois
Illinois Teacher Office
351 Education Building
Urbana, IL 61801

29. Indiana University Press
501 North Morton Street
Bloomington, IN 47401

30. Industrial Commission of Ohio
Division of Safety and Hygiene
2325 West Fifth Avenue
Columbus, OH 43216

31. The Interstate Printers & Publishers, Inc.
19–27 North Jackson Street
Danville, IL 61832

32. McGraw-Hill Book Co.
1221 Avenue of the Americas
New York, NY 10020

33. David McKay Co., Inc.
750 Third Avenue
New York, NY 10017

34. McKnight Publishing Company
P.O. Box 2854
Bloomington, IL 61701

35. Macmillan Publishing Co., Inc.
866 Third Avenue
New York, NY 10022

36. Maryland Center for Public Broadcasting
P.O. Box 1975
Owings Mills, MD 21117

37. Charles E. Merrill Publishing Co.
1300 Alum Creek Drive
Columbus, OH 43216

38. The C. V. Mosby Co., Inc.
11830 Westline Industrial Drive
St. Louis, MO 63141

39. National Business Education Association
Box 47
1201 Sixteenth Street, N.W.
Washington, DC 20026

40. National Education Association
120 Sixteenth Street, N.W.
Washington, DC 20036

41. National Science Supervisors Assoc.
c/o Kenneth W. Horn, Administrator
Denver Public Schools
1521 Irving Street
Denver, CO 80204

42. Pennsylvania Department of Education
Bureau of Vocational Education
Harrisburg, PA 17126

43. Prakken Publications, Inc.
Box 623
416 Longshore Drive
Ann Arbor, MI 48107

44. Prentice-Hall, Inc.
Englewood Cliffs, NJ 07632

45. The Procter & Gamble Company
Educational Services
P.O. Box 599
Cincinnati, OH 45201

46. Research Press Company
Box 3177
Champaign, IL 61820

47. Scott, Foresman and Company
1900 East Lake Avenue
Glenview, IL 60025

48. Silver-Burdett Company
250 James Street
Morristown, NJ 10022

49. U.S. Government Printing Office
Division of Public Documents
Washington, DC 20402

50. University Associates, Inc.
7596 Eads Avenue
La Jolla, CA 92037

51. University Bookstore
360 State Street
West Lafayette, IN 47906

52. University of Chicago Press
5801 Ellis Avenue
Chicago, IL 60637

53. University of Minnesota
Williamson Hall Bookstore
Minneapolis, MN 45455

54. The University of Texas
Division of Extension
Austin, TX 78712

55. Dr. Elaine Uthe
3345 Carriage Lane
Lexington, KY 40502

56. VIMCET Associates, Inc.
P.O. Box 24714
Los Angeles, CA 90024

57. Vocational Education Media Center
Clemson University
Clemson, SC 29631

58. Wadsworth Publishing Co., Inc.
10 Davis Drive
Belmont, CA 94002

59. **STUDENT VOCATIONAL ORGANIZATIONS**
Distributive Educational Clubs of America
200 Park Avenue
Falls Church, VA 22046

Future Homemakers of America
2010 Massachusetts Avenue, N.W.
Washington, DC 20036

Future Farmers of America Center
P.O. Box 15160
Alexandria, VA 22309

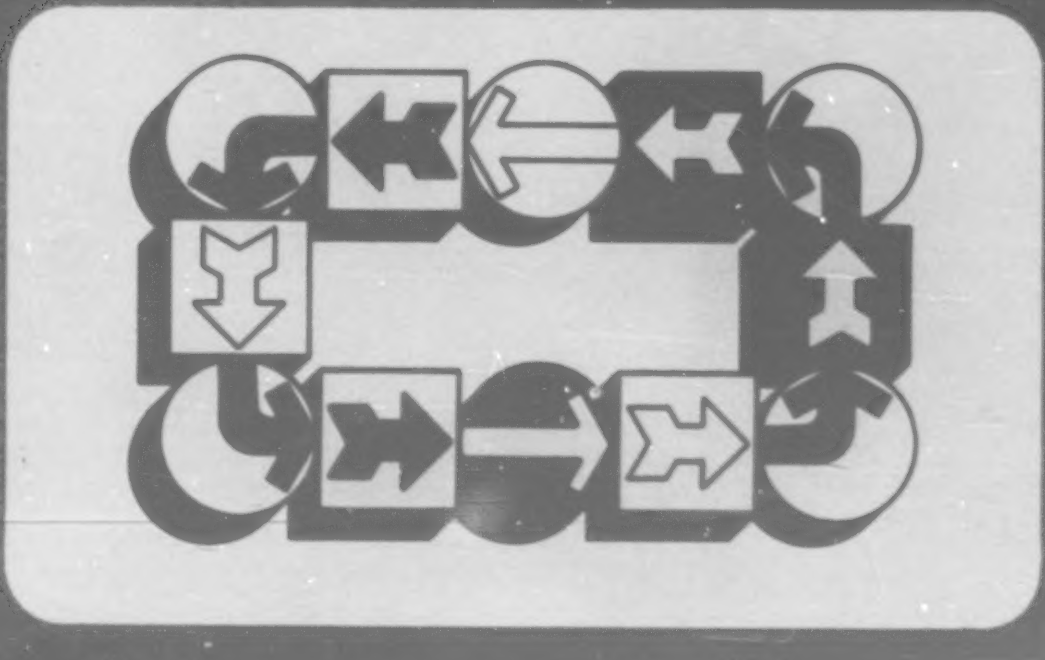
Office Education Association
1120 Morse Road
Columbus, OH 43229

Future Business Leaders of America
1201 Sixteenth Street, N.W.
Washington, DC 20036

Vocational Industrial Clubs of America
105 North Virginia Road
Falls Church, VA 22046

Appendix F

STUDENT GUIDE TO USING PERFORMANCE-BASED TEACHER EDUCATION MATERIALS



FOREWORD

This guide has been developed to help you, a preservice or inservice vocational teacher, understand the general nature and use of The Center's performance-based teacher education (PBTE) materials. A series of 100 modularized learning packages focusing upon the specific professional competencies needed by vocational teachers has been developed and extensively field tested. The competencies upon which these modules are based were identified and verified through research as being important to successful vocational teaching at both the secondary and post-secondary levels. The modules have also been designed so as to be suitable for the preparation of teachers in all vocational service areas and occupational specialties.

Each module provides learning experiences that integrate theory and practice; each culminates with criterion-referenced assessment of the teacher's performance of the specified competency. The materials are designed for use by teachers, either on an individual or group basis, working under the direction of one or more resource persons (instructors).

The design of the materials provides considerable flexibility for planning and conducting preservice and inservice teacher education and staff development programs to meet a wide variety of individual needs and interests. The materials are intended for use by universities and colleges, secondary and post-secondary institutions, state departments of education, and others in manpower and industrial settings who are responsible for the professional development of teachers and instructors. Further information on the nature and use of these curricular materials is contained in two slide/tape presentations entitled "U and PBTE" for orienting teachers to using The Center's PBTE materials and "Overview of The Center's PBTE Program." You may wish to ask your resource person for an opportunity to view one or both of these presentations.

Special recognition for their roles in the development, field testing, and revision of this document goes to Robert E. Norton, Associate Program Director of The Center's Professional Development in Vocational Education area, who was responsible for helping to write the field-test version and for preparing this published version; and to May Huang who helped write the first edition. Recognition is also extended to Jean Wisenbaugh, Artist, and to other members of the Professional Development in Vocational Education staff who critiqued the document and made helpful suggestions for its improvement.

Appreciation is also extended to all those outside The Center (preservice and inservice teachers, staff development coordinators, teacher educators, field site coordinators) who used this guide under field-test conditions and who provided valuable feedback for its refinement. Among the external group, special thanks go to Dr. Harold Parady, Executive Director of the American Association for Vocational Instructional Materials, and to George Smith, Art and Layout Editor, for their cooperation and valuable assistance in the publication of this guide.

The Center is grateful to the National Institute of Education (NIE) for sponsorship of this PBTE curriculum development effort (of which the guide was one product) from 1972 through its completion. Appreciation is extended to the Bureau of Occupational and Adult Education of the U.S. Office of Education for its sponsorship of training and of the advanced testing of the modules and this guide through the National Institute for Performance-Based Teacher Education at ten sites under provisions of EPDA Part F, Section 553. Thanks are also due to the eight other sites who also participated in the advanced testing effort under NIE and self-sponsorship.

Robert E. Taylor
Executive Director
The Center for Vocational Education

THE CENTER FOR VOCATIONAL EDUCATION
The Ohio State University • 1960 Kenny Road • Columbus, Ohio 43210

The Center for Vocational Education's mission is to increase the ability of diverse agencies, institutions, and organizations to solve educational problems relating to individual career planning, preparation, and progression. The Center fulfills its mission by:

- Generating knowledge through research.
- Developing educational programs and products.
- Evaluating individual program needs and outcomes.
- Installing educational programs and products.
- Operating information systems and services.
- Conducting leadership development and training programs.

AAVIM

**AMERICAN ASSOCIATION
FOR VOCATIONAL
INSTRUCTIONAL MATERIALS**

Engineering Center
University of Georgia
Athens, Georgia 30602

The American Association for Vocational Instructional Materials (AAVIM) is an interstate organization of universities, colleges and divisions of vocational education devoted to the improvement of teaching through better information and teaching aids.

Student Guide...

to Using Performance-Based Teacher Education Materials

PROFESSIONAL TEACHER EDUCATION MODULE SERIES

Robert E. Norton, Associate Program Director
May W. Huang, Graduate Research Associate

The Center for Vocational Education
The Ohio State University

Copyright 1978 by The Center for Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.

Copyright is claimed until January 14, 1982. Thereafter all portions of this work covered by this copyright will be in the public domain.

This work was developed under a contract with Department of Health, Education, and Welfare, National Institute of Education. However, the opinions and other content do not necessarily reflect the position or policy of the Agency, and no official endorsement should be inferred.

1978

ISBN: 0-89606-001-2

Published and distributed by the **American Association for Vocational Instructional Materials (AAVIM),** 120 Engineering Center, University of Georgia, Athens, Georgia 30602, (404) 542-2586.

CONTENTS

INTRODUCTION 109

Part I. Questions about PBTE in General 111

Part II. Questions about The Center' PBTE Materials

- Who Developed the PBTE Materials? 113
- Why Were the PBTE Modules Developed? 113
- What Are the PBTE Modules Like? 114
- How Can the Modules Be Used Most Effectively? 116

Part III. PBTE Terms You Should Know 123

INTRODUCTION

You are about to embark on a new type of learning experience—one that can be exciting and enjoyable, as well as challenging and demanding. We think that you'll like the experience. If you are a preservice teacher, we think you'll be better prepared because of your performance-based preparation to take your place in the teaching profession. If you are already a teacher, we think you'll become an even more effective teacher because of your performance-based learning experiences. You'll be doing several things differently and, we think, better. You'll still meet and work regularly with your fellow teachers, and with your professors or staff development leaders (coordinators, supervisors), but more of your contacts will be on an individual and small-group basis. You'll have more opportunity to learn by doing, to express your own views and concerns, and to pursue your own learning style and interests. While there will be fewer, if any, large-group sessions (e.g., lectures), there will be much more opportunity to choose among learning activities and to pursue them at your own pace. You'll find that you will be participating in learning experiences which are directly relevant to your needs as a vocational teacher.

As with anything else that is new or different, you are likely to have questions about performance-based teacher education (PBTE). It is only natural to be a little bit apprehensive or uneasy about any significant change that will affect you directly. While we are confident that you will like this new approach to teacher education, your questions deserve simple and straightforward answers. This guide has been developed specifically to answer as many of your questions as we could anticipate. It will also serve to explain how learning by PBTE can be made easier and more satisfying.

This guide is designed to help orient both preservice and inservice vocational teachers to PBTE. The information presented in the guide is organized in an easy-to-read, question-and-answer format. The questions which we feel are most likely to be of concern to teachers are categorized under the following two major headings:

I. Questions about PBTE in General

II. Questions about The Center's PBTE Materials

So that we might all talk and use the same language, Part III consists of a list of PBTE Terms You Should Know. Good luck as you begin a new and more individualized approach to teacher preparation.

Part I

QUESTIONS ABOUT PBTE IN GENERAL

1. What is performance-based teacher education (PBTE)?

PBTE is an approach to teacher preparation in which the teacher is **required to demonstrate** essential teaching tasks in an actual teaching situation. Actual performance of the tasks ensures that the teacher has not only the knowledge required, but also the **ability to perform** the competencies (teaching skills or tasks) that are essential to successful teaching.

2. What are the essential teaching competencies?

A teaching competency is defined as the knowledge, skills, and attitudes necessary to perform a critical teaching task (e.g., develop a unit of instruction, direct student laboratory experience, present information with filmstrips and slides, etc.). Successful performance as a teacher requires both a solid understanding of one's **technical subject matter area** (auto mechanics, horticulture, retailing, etc.) and competence in the **professional teaching skills and knowledge.** While both types of learning are essential to teachers, in PBTE programs, the focus is on acquiring the teaching skills needed to carry out the instructional process effectively.

3. What difference will PBTE make?

There is quite a difference between **knowing about** the job and being **able to do** the job. In traditional programs, individuals may gain knowledge about teaching and yet not develop the ability to teach. In PBTE programs, individuals must demonstrate their ability to perform in an actual school situation. When a program is not performance-based, the emphasis tends to be on completing courses required for graduation and/or certification.

4. Is competency-based teacher education the same as performance-based teacher education?

Many educators tend to use these two terms synonymously. However, other people distinguish between these two terms, using the word "competency" to emphasize the fact that learning in competency-based programs is structured around the identified and verified **competencies** needed by teachers. In performance-based programs, the word "performance" is used to emphasize the fact that these programs require teachers to demonstrate their ability to **perform** the essential competencies in an actual school setting.

Part II

QUESTIONS ABOUT THE CENTER'S PBTE MATERIALS

Who Developed the PBTE Materials?

5. What is The Center for Vocational Education?

The Center is a national research and development organization which specializes in the development and evaluation of materials for vocational educators. Located at The Ohio State University in Columbus, Ohio, The Center developed the PBTE materials in response to the need for more innovative and effective ways of preparing and upgrading teachers' skills.

6. What was the basis for the development of the PBTE materials?

Charged with the responsibility of finding ways to improve vocational teacher preparation, Center staff members initiated a comprehensive research study to identify the competencies which are important to successful vocational teaching. These competencies, which were verified as important by over 100 practicing vocational educators, formed the basis for development of the PBTE instructional materials.

7. Have the materials been field tested?

The materials have been field tested twice, and extensively so. This is a unique feature of these curricular materials when compared with most textbooks and other materials commonly used to prepare teachers. The modules underwent preliminary field testing in three different institutions where both preservice and inservice teachers and their instructors provided detailed feedback. After revision, all 100 modules underwent advanced testing through which detailed feedback was again obtained. Over 2,000 teachers and 300 instructors, located in twenty different institutions, were involved and provided the feedback used in refining the materials for publication. (A list of the institutions involved is given in the foreword to the modules.)

Why Were the PBTE Modules Developed?

8. What is a PBTE module?

In most performance-based teacher education programs, learning materials are developed and organized into some type of instructional package. In The Center's curricula, each module is an instructional **package** designed to cover a single teaching skill. The package includes a series of learning experiences that contain information, activities, and feedback devices to help the teacher acquire the skill.

9. Why were modules developed?

Modules were chosen as the most suitable type of instructional package available because—

- Modules facilitate the **individualization** of instruction to meet specific teacher needs and interests.
- Modules lend themselves to coverage of a single teaching skill or competency and, hence, because of their short duration, provide for more **flexible use** by teachers.

In the performance-based teacher education programs, the emphasis is on developing the skills necessary to perform effectively in actual teaching situations.

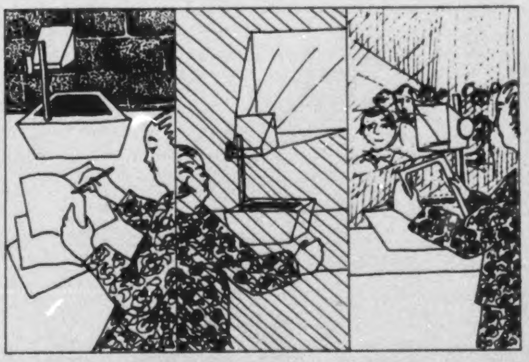
- Modules lend themselves to a **performance objectives structure** which makes it easy for teachers to determine what they are to learn and how their learning will be assessed.
- Modules provide **more options** to the teacher and instructional staff in the selection and sequencing of their instructional program.
- Modules, because of their **size**, are much more easily added to, modified, updated, or discarded than courses or textbooks.

What Are the PBTE Modules Like?

10. What are the major parts of a module?

Each module contains four major sections. Sections, in the order of their appearance in the module, are as follows:

- **Introduction.**—The introduction provides the frame of reference for the entire module, i.e., relationship to other modules and the teacher education program, definition of terms unique to the module, and the importance of the competency to be developed.
- **About This Module.**—This section lists the performance objectives for the module, the resources needed, and the prerequisite competencies where appropriate.
- **Learning Experiences.**—Each learning experience begins with an overview. The overview uses graphic symbols and brief statements to highlight and describe the major learning activities involved in the learning experience and the type of feedback provided the user. The learning experiences include directions for completing the learning activities, optional activities, information sheets, and feedback procedures and instruments. The final learning experience always provides for assessing the teacher's ability to perform the given competency in an actual school setting.
- **About Using The Center's PBTE Modules.**—This section provides an explanation of how all 100 of The Center's PBTE modules are organized, recommended procedures for their use, a definition of terms common to all modules, and an explanation of the various levels of performance used in the assessment instruments contained within the modules.



Each module contains background knowledge, application and/or practice activities, and an opportunity to demonstrate the competency involved in a classroom setting.

11. Why is there more than one learning experience in each module?

When learning about and developing a specific competency in teaching, you need some basic knowledge before putting the competency into use. In most modules, the first one or two learning experiences are designed to provide the necessary **background knowledge** about the teaching competency. The next one or two experiences usually focus on the "how" and provide an opportunity for you to **practice** or **apply** the competency in a simulated situation. In some cases, background knowledge and practice activities may be combined within a single learning experience. The final learning experience always requires **performing** the competency in an actual school setting.

12. Why do the modules have optional activities?

Optional activities are designed to supplement and enrich the required learning experiences. Their purpose is to provide more choice, greater flexibility, and additional opportunities for those who desire to further their learning. In addition, you can design additional optional activities of your own as appropriate.

13. Why are the modules self-contained?

Most of The Center's modules contain all the materials you will need, in order to make them easier for you to use. Teachers who used earlier versions of the modules indicated they often experienced difficulty in finding outside resources. Hence, to reduce frustration and increase study efficiency, nearly all of the modules now contain all the essential background knowledge you will need in the form of information sheets. To provide for enrichment and reinforcement, most modules also suggest optional outside references for your consideration.

14. How many modules are there in The Center's PBTE program?

One hundred modules have been developed. They have been clustered into ten categories according to professional skill areas, and the covers have been color-coded for easy reference as follows:

Category	Title	Color Code	No. of Modules
A	Program Planning, Development, and Evaluation	Red	11
B	Instructional Planning	Yellow	6
C	Instructional Execution	Turquoise	29
D	Instructional Evaluation	Lime	6
E	Instructional Management	Orange	9
F	Guidance	Gold	5
G	School-Community Relations	Rust	10
H	Student Vocational Organization	Light Gold	6
I	Professional Role and Development	Gray	8
J	Coordination of Cooperative Education	Green	10
		TOTAL	100

15. Why are different cover and internal colors used?

Each category of modules has a different cover color to add variety and to aid users in quickly identifying the category to which a module belongs. Each category of modules also has a second color which is used internally with different degrees of screening to improve the appearance and effectiveness of the illustrations, overviews, samples, and figures. A color tab appears on the margins of each page of each learning experience to aid the user in locating a specific learning experience. Selected columns of the various checklists are also shaded to indicate the acceptable levels of performance.

16. What is the purpose of the illustrations?

You will find the modules contain a considerable number of illustrations and other graphics. These have been included for several important reasons. First of all, they serve to break up the printed copy, making the modules easier to read and visually more appealing. They further serve to add variety, interest, and some humor to the topics covered. Perhaps most important, the illustrations are used to emphasize key points and increase the visual impact (a picture is worth a thousand words) of the materials.

A number of different characters are used throughout the 100 modules to serve some specific functions. Let's let them speak for themselves—

We are the people who will try to provide you with visual explanatory information, guide you through the learning activities, and make you comfortable as you use the modules. In the modules, you will see us in the introductions and in the information sheets. You will come to recognize us as the characters who "narrate" the text.

The illustrations would not be complete without teachers. Let us show you the many vocational teachers who you will find explaining, guiding, demonstrating, and otherwise actively going about the teaching-learning process.

Nor would the job be complete if we did not introduce you to the various student characters who you will also find in the illustrations. After all, it is the improvement of the instructional program for our secondary and post-secondary students that is our ultimate goal in PBTE.

How Can the Modules Be Used Most Effectively?

17. Do I have to complete all the 100 modules?

No. The number of modules you will need to take depends upon your previous experience and your present competency in teaching.

Even the number of learning experiences you need to go through in each module is flexible. All of the modules have been designed to allow for a tailor-made program that meets your specific needs and interests.

18. Who decides how many modules I must complete?

You and your resource person(s) (the instructor, professor, supervisor, staff development coordinator, or other person responsible for your instructional program) will decide which, and how many, modules you need to complete. (See the back cover of this guide or a copy of the Vocational Teacher Competency Profile for a listing of the 100 titles available.) In most cases, instructional and certification requirements have been established in your college/university and state. With the help of your resource person(s), you will first assess your present teaching skills with regard to these requirements. This will help you identify and decide which, and how many, modules you need to take.

19. Who will be my resource person(s)?

Your resource person(s) can be a professor, a cooperating teacher, an instructional supervisor, an administrator, a state supervisor, or other qualified person who is responsible for guiding and helping you in planning your educational program. The modules are not designed to be totally self-instructional; your resource person(s) should be contacted for assistance whenever you need help in completing a module. The resource person is a very important facilitator in any successful PBTE program.

20. Do I have to take modules in a certain sequence?

Most modules have been designed as self-contained learning packages, and you can sequence them according to your own needs and interests. However, there are prerequisite competencies for certain modules. In these cases, fulfilling the prerequisite requirements helps you to successfully complete the modules. (See the inside back cover of this guide for a graphic illustration of the competencies—by module number—that are prerequisite to others.)

21. How much time is required to complete a module?

The time requirement varies from module to module, individual to individual, and situation to situation. The range of time required to complete a particular learning experience varies from about one half hour to two hours. Since most modules consist of three to five learning experiences, most modules will take somewhere between two to ten hours to complete.

In The Center's approach to PBTE, the teacher educator is actively involved as a resource person and advisor.

22. Will I need other written resources when I take a module?

Generally not. Most modules are self-contained, but some outside resources are required and/or recommended for the purpose of providing essential or optional (enriching and reinforcing) learning activities.

23. Can I team up with others to work on the same module?

Yes. As a matter of fact, you can probably get more out of some modules by working with others as a team. In other cases, you may find working alone is the best way to get the most out of a module.

24. How can I get the most out of a module?

A strong desire to learn the competency involved will help the most. In addition, you will find observing the following guidelines very worthwhile.

- Since you will be taking major responsibility for your learning, you will need to know exactly what is to be learned and in what way. Therefore, be sure to spend a few minutes carefully reading through (1) the title page, (2) the introduction, (3) the About This Module section, (4) the overviews of each learning experience, and (5) the About Using The Center's PBTE Modules section. Thorough understanding of these parts is essential.
- Since modularized learning is mostly self-directed, you need to develop self-discipline in directing your own learning. The best thing you can do is to make out a plan of action and communicate it to your resource person(s). A simple Module Worksheet is shown in Sample 1 for your possible use. You might find it especially helpful to make copies to use as you complete the first few modules.
- Since you have the option of not going through all the learning experiences in each module, you need to be as objective as you can when you assess your present competency and decide on which learning experiences you need to take. Otherwise, you may end up depriving yourself of some knowledge or the practice necessary to master a certain competency.
- Since your resource person(s) has the responsibility to help you whenever you need assistance, you should inform him/her about your needs as early as possible so he/she will have sufficient time to assist you or make other necessary arrangements.

25. Can persons in different service areas use the modules?

Yes. The learning experiences have been carefully designed so that teachers in all vocational service areas, at both the secondary and post-secondary levels, can use the modules. Furthermore, teachers, supervisors, and teacher educators from all vocational service areas participated in the research effort that identified the competencies upon which the modules are based.

26. Can industrial arts teachers, adult instructors, industrial trainers, and manpower instructors benefit from the use of the modules?

Very definitely. Many of the competencies needed by these persons are identical to, or at least closely associated with, those needed by vocational teachers. A number of industrial arts teachers, adult instructors, and manpower instructors have successfully used the PBTE materials during the advanced field testing.

27. Can teachers in general education use the modules?

While the research and development effort focused upon the competencies and materials needed by secondary and post-secondary vocational teachers, general education teachers already have found, and will continue to find, many of the modules to be applicable to their teaching responsibilities. While most of the examples and case studies are drawn from vocational education, the competencies themselves are, for the most part, relevant (generic) to all teachers. Special consideration should be given to modules in Category B: Instructional Planning, Category C: Instructional Execution, and Category D: Instructional Evaluation.

28. Can experienced teachers benefit from the modules?

Yes. Experienced teachers can definitely benefit if they need any of the competencies covered by the modules. Most teachers, through frank self-appraisal, will discover several competency areas in which they could improve or expand their skills. Besides, the nature and number of competencies involved requires that some of the competencies be obtained through inservice or graduate programs.

29. You mention "feedback" and "assessment"; what do they mean?

Toward the end of each learning experience, you will get feedback on how well you are doing. It may be in the form of a self-check with model answers, or a checklist for you, your peer(s), and/or resource person(s) to rate your achievement on a scale. At the end of each module, your total performance will be assessed by your resource person, using a Teacher Performance Assessment Form specifically designed for each module. Through this continuous evaluation process, both you and your resource person(s) will know how far and how well you are progressing in developing the competency.

30. How will my performance be assessed?

Your overall performance will always be assessed by your resource person(s) on the basis of your performance in the final learning experience of each module you take. It is important that you keep a record of your activities and keep your resource person(s) well informed of your progress. A suggested Personal Progress Record form is shown in Sample 2 for your consideration.

31. Why does the final learning experience have to be completed in an actual school situation?

Since the modules are performance-based, it is essential that teachers demonstrate their ability to perform the competency in a real school setting rather than in a simulated situation or on a paper-and-pencil test.

32. How will my progress be recorded and/or graded?

The record-keeping system used will vary widely depending upon the type of staff development or teacher preparation program in which you are participating. Some institutions have been using the Vocational Teacher Competency Profile chart to record progress in module completion, while others are devising their own forms and procedures. In some instances, grades are given (e.g., in teacher education institutions), and in other cases, salary or certification credits are awarded (e.g., in staff development programs). For a specific answer, you should direct this question to your resource person(s).

33. Do I get to keep the modules?

Yes, if you have paid for them. In a few cases, the university or other educational agency involved will supply the materials free of charge. Because of their content, it is expected that you will want to keep most of them for future reference.

SAMPLE 1

MODULE WORKSHEET*

Name ____________________

Module No. ____________ Module Title ____________

Resource Person(s) for this module:

Name ____________ Office ____________ Office phone ____________

Check off the following study procedures as they are completed:

☐ 1. Read the INTRODUCTION

☐ 2. Read the ABOUT THIS MODULE section

☐ 3. Examine the OVERVIEW of each learning experience

☐ 4. Read the FIELD EXPERIENCE

☐ 5. Read the ABOUT USING THE CENTER'S PBTE MODULES section

Complete the following with the assistance and approval of the resource person:

☐ 6. Assess present capability [illegible]

☐ 7. Determine need to complete [illegible]

☐ 8. [illegible]

[illegible]

---

*Permission is granted to locally reproduce this worksheet.

109

SAMPLE 2

PERSONAL PROGRESS RECORD*

Performance-Based Teacher Education Program

Name ______________________ **Subject Major** ______________________

Enter the date each learning procedure is completed.

Module No.	**Module Title**	Conference No. 1												**Resource Persons**
		Present Competency Assessed	Decision Made to Take Module	Decision Made to Select Another Module	Learning Experience No. 1	Learning Experience No. 2	Learning Experience No. 3	Learning Experience No. 4	Learning Experience No. 5	Ready for Final Assessment	Final Assessment	Conference No. 2	Conference No. 3	

---

*Permission is granted to locally reproduce this worksheet.

Part III

PBTE TERMS YOU SHOULD KNOW

Activity:

Refers to one of the several required learning tasks that are designed to help students achieve an enabling or terminal objective.

Actual School Situation:

Refers to a situation in which you are actually teaching vocational students in a secondary or post-secondary school. A student teacher, an inservice teacher, or an intern would be functioning in an actual school situation.

Alternate Activity or Feedback:

Refers to an item or feedback device which may **substitute** for required items which, due to special circumstances, you are unable to complete.

Competency:

Refers to achievement of the knowledge, skills, and attitudes required to perform a given task.

Competency-Based Teacher Education (CBTE):

Refers to an approach to teacher preparation in which the **emphasis** is on developing specified teaching competencies rather than on gaining knowledge of how to teach. Many educational leaders use this term synonymously with Performance-Based Teacher Education.

Enabling Objective:

Refers to one of the several process-type objectives that help students progress toward achievement of a terminal objective. For each enabling objective in a module, a learning experience has been specifically designed to help teachers achieve it.

Feedback:

Refers in The Center's modules to the immediate reinforcement of learning that one receives in each learning experience through the use of model answers or some type of a checklist completed by oneself, one's peers, and/or resource person(s).

Inservice Teacher:

Refers to a person who is already employed and working as a teacher or instructor.

Learning Experience:

Refers to a series of required and optional learning activities contained within each module whose completion leads toward the accomplishment of a single performance objective.

Module:

Refers to the type of learning materials that are developed for most PBTE programs and organized into modular (package) form. Modules vary widely in form, length, and scope from program to program. Some consist of a one- or two-page outline, while others are comprehensive self-contained instructional packages of fifty or more pages each. Most of The Center's modules contain all of the essential learning material for achieving a specified terminal performance objective.

Occupational Specialty:

Refers to a specific area of preparation within a vocational service area (e.g., the service area Trade and Industrial Education includes occupational specialties such as automobile mechanics, welding, and electricity).

Optional Activity or Feedback:

Refers to an activity or item which is not required, but which is designed to **supplement** and enrich the required activities in a learning experience.

Overview:

Refers to the first page of each learning experience in The Center's modules, with the exception of the final learning experience. The overview uses graphic symbols and brief statements to give the teacher a quick preview of the major learning activities involved in the learning experience, and the type of feedback provided the user.

Peer:

Refers to a fellow teacher, a roommate, or a friend who is used to (1) role-play a student, (2) critique your performance, and/or (3) participate with you in seminar-type discussio[illegible] Whenever possible, a peer should be a person in y[illegible] own occupational specialty.

Performance-Based Teacher Education (PBTE):

Refers to an approach to teacher preparation in which the **emphasis** is on developing the ability to "perform" (teach) in an actual school situation rather than on the "knowledge" of teaching. The focus of PBTE programs is on the teacher's development and demonstration of competencies that have been identified and verified as important to successful teachers.

Performance Objective:

Refers to a statement describing desired student performance, the conditions under which the performance is to occur, and the criteria by which the performance will be evaluated.

Preservice Teacher:

Refers to a person who is preparing for future employment as a teacher or instructor.

Resource Person:

Refers to the professor, instructional supervisor, staff development leader, cooperating teacher, administrator, state supervisor, or other person who is responsible for guiding you and helping you plan and carry out your professional development program.

Student (in the modules):

Refers to the secondary or post-secondary students whom you are or will be teaching.

Terminal Objective:

Refers to an objective describing the competency the teacher is expected to perform in an actual school situation upon completing the module.

You or the Teacher:

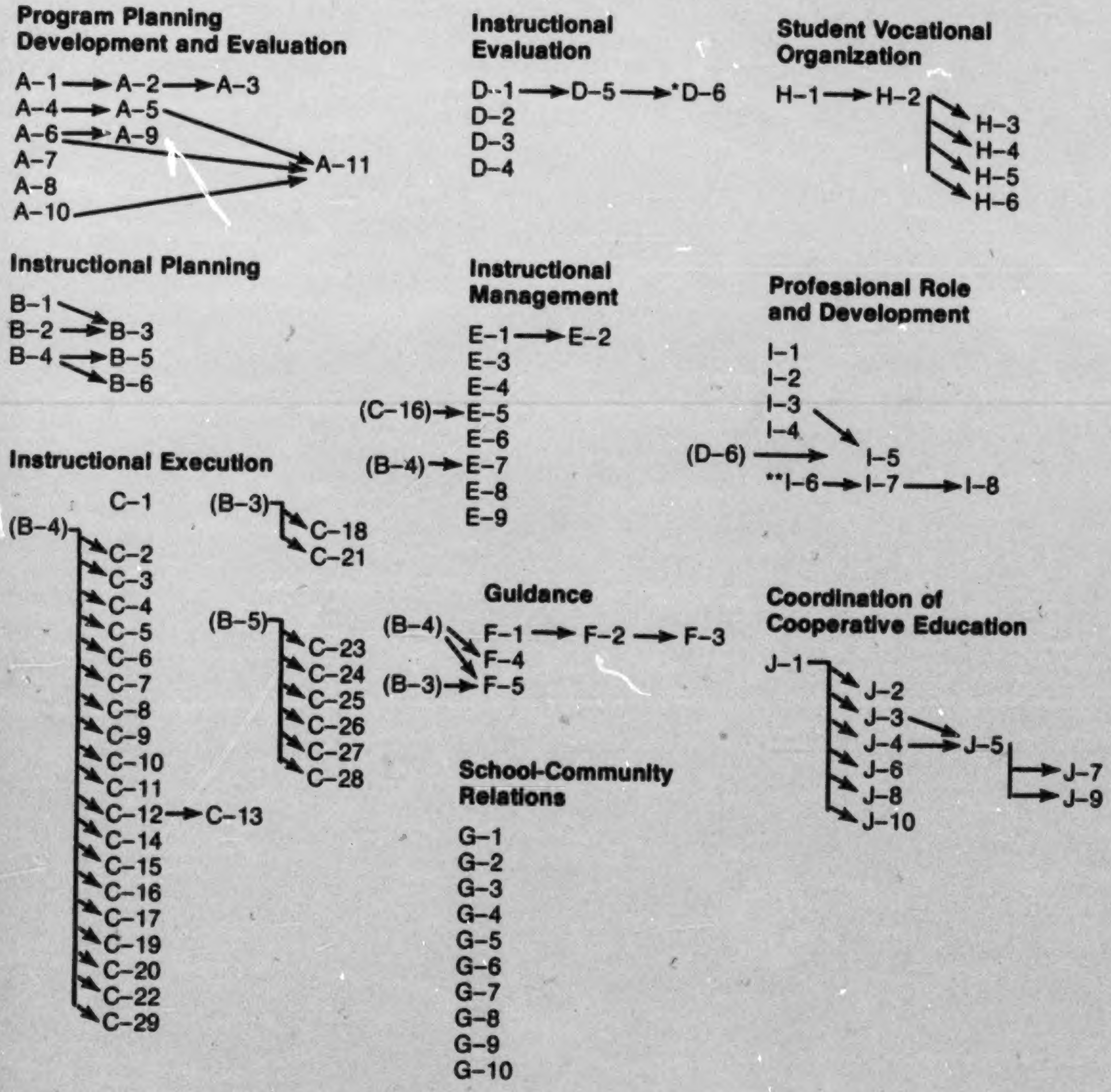
Refers to the person who is taking the module.

Vocational Teacher Competency Profile:

Refers to a profile chart which displays, in graphic form, the ten categories and the 100 modules that comprise The Center's PBTE curricula. The profile chart can be used in many ways: to inform you of the competencies covered by the modules; to record your progress in completing modules; as a competency transcript; etc. Your resource person(s) should have copies available.

Prerequisite Competencies for The Center's Performance-Based Teacher Education Modules

Modules shown before the arrow (→) are prerequisite to modules to which the arrow points. Module numbers within parentheses ( ) indicate prerequisites from other module categories.



---

*Competency in the broad areas of instructional planning, execution, and evaluation is required.

**Teaching experience is prerequisite.

Titles of The Center's Performance-Based Teacher Education Modules

Category A: Program Planning, Development, and Evaluation

A–1 Prepare for a Community Survey
A–2 Conduct a Community Survey
A–3 Report the Findings of a Community Survey
A–4 Organize an Occupational Advisory Committee
A–5 Maintain an Occupational Advisory Committee
A–6 Develop Program Goals and Objectives
A–7 Conduct an Occupational Analysis
A–8 Develop a Course of Study
A–9 Develop Long-Range Program Plans
A–10 Conduct a Student Follow-Up Study
A–11 Evaluate Your Vocational Program

Category B: Instructional Planning

B–1 Determine Needs and Interests of Students
B–2 Develop Student Performance Objectives
B–3 Develop a Unit of Instruction
B–4 Develop a Lesson Plan
B–5 Select Student Instructional Materials
B–6 Prepare Teacher-Made Instructional Materials

Category C: Instructional Execution

C–1 Direct Field Trips
C–2 Conduct Group Discussions, Panel Discussions, and Symposiums
C–3 Employ Brainstorming, Buzz Group, and Question Box Techniques
C–4 Direct Students in Instructing Other Students
C–5 Employ Simulation Techniques
C–6 Guide Student Study
C–7 Direct Student Laboratory Experience
C–8 Direct Students in Applying Problem-Solving Techniques
C–9 Employ the Project Method
C–10 Introduce a Lesson
C–11 Summarize a Lesson
C–12 Employ Oral Questioning Techniques
C–13 Employ Reinforcement Techniques
C–14 Provide Instruction for Slower and More Capable Learners
C–15 Present an Illustrated Talk
C–16 Demonstrate a Manipulative Skill
C–17 Demonstrate a Concept or Principle
C–18 Individualize Instruction
C–19 Employ the Team Teaching Approach
C–20 Use Subject Matter Experts to Present Information
C–21 Prepare Bulletin Boards and Exhibits
C–22 Present Information with Models, Real Objects, and Flannel Boards
C–23 Present Information with Overhead and Opaque Materials
C–24 Present Information with Filmstrips and Slides
C–25 Present Information with Films
C–26 Present Information with Audio Recordings
C–27 Present Information with Televised and Videotaped Materials
C–28 Employ Programmed Instruction
C–29 Present Information with the Chalkboard and Flip Chart

Category D: Instructional Evaluation

D–1 Establish Student Performance Criteria
D–2 Assess Student Performance: Knowledge
D–3 Assess Student Performance: Attitudes
D–4 Assess Student Performance: Skills
D–5 Determine Student Grades
D–6 Evaluate Your Instructional Effectiveness

Category E: Instructional Management

E–1 Project Instructional Resource Needs
E–2 Manage Your Budgeting and Reporting Responsibilities
E–3 Arrange for Improvement of Your Vocational Facilities
E–4 Maintain a Filing System
E–5 Provide for Student Safety
E–6 Provide for the First Aid Needs of Students
E–7 Assist Students in Developing Self-Discipline
E–8 Organize the Vocational Laboratory
E–9 Manage the Vocational Laboratory

Category F: Guidance

F–1 Gather Student Data Using Formal Data-Collection Techniques
F–2 Gather Student Data Through Personal Contacts
F–3 Use Conferences to Help Meet Student Needs
F–4 Provide Information on Educational and Career Opportunities
F–5 Assist Students in Applying for Employment or Further Education

Category G: School-Community Relations

G–1 Develop a School-Community Relations Plan for Your Vocational Program
G–2 Give Presentations to Promote Your Vocational Program
G–3 Develop Brochures to Promote Your Vocational Program
G–4 Prepare Displays to Promote Your Vocational Program
G–5 Prepare News Releases and Articles Concerning Your Vocational Program
G–6 Arrange for Television and Radio Presentations Concerning Your Vocational Program
G–7 Conduct an Open House
G–8 Work with Members of the Community
G–9 Work with State and Local Educators
G–10 Obtain Feedback about Your Vocational Program

Category H: Student Vocational Organization

H–1 Develop a Personal Philosophy Concerning Student Vocational Organizations
H–2 Establish a Student Vocational Organization
H–3 Prepare Student Vocational Organization Members for Leadership Roles
H–4 Assist Student Vocational Organization Members in Developing and Financing a Yearly Program of Activities
H–5 Supervise Activities of the Student Vocational Organization
H–6 Guide Participation in Student Vocational Organization Contests

Category I: Professional Role and Development

I–1 Keep Up-to-Date Professionally
I–2 Serve Your Teaching Profession
I–3 Develop an Active Personal Philosophy of Education
I–4 Serve the School and Community
I–5 Obtain a Suitable Teaching Position
I–6 Provide Laboratory Experiences for Prospective Teachers
I–7 Plan the Student Teaching Experience
I–8 Supervise Student Teachers

Category J: Coordination of Cooperative Education

J–1 Establish Guidelines for Your Cooperative Vocational Program
J–2 Manage the Attendance, Transfers, and Terminations of Co-Op Students
J–3 Enroll Students in Your Co-Op Program
J–4 Secure Training Stations for Your Co-Op Program
J–5 Place Co-Op Students on the Job
J–6 Develop the Training Ability of On-the-Job Instructors
J–7 Coordinate On-the-Job Instruction
J–8 Evaluate Co-Op Students' On-the-Job Performance
J–9 Prepare for Students' Related Instruction
J–10 Supervise an Employer-Employee Appreciation Event

RELATED PUBLICATIONS

Student Guide to Using Performance-Based Teacher Education Materials
Resource Person Guide to Using Performance-Based Teacher Education Materials
Guide to the Implementation of Performance-Based Teacher Education

---

For information regarding availability and prices of these materials contact—

AAVIM
American Association for Vocational Instructional Materials
120 Engineering Center • Athens, Georgia 30602 • (404) 542–2586